<210> 1439 <211> 425 <212> PRT <213> Homo sapiens

<400> 1439 Met Ser Leu Thr Ile Trp Thr Val Cys Gly Val Leu Ser Leu Phe Gly 10 Ala Leu Ser Tyr Ala Glu Leu Gly Thr Thr Ile Lys Lys Ser Gly Gly 20 25 His Tyr Thr Tyr Ile Leu Glu Val Phe Gly Pro Leu Pro Ala Phe Val 40 Arg Val Trp Val Glu Leu Leu Ile Ile Arg Pro Ala Ala Thr Ala Val 55 Ile Ser Leu Ala Phe Gly Arg Tyr Ile Leu Glu Pro Phe Phe Ile Gln 70 75 Cys Glu Ile Pro Glu Leu Ala Ile Lys Leu Ile Thr Ala Val Gly Ile 90 85 Thr Val Val Met Val Leu Asn Ser Met Ser Val Ser Trp Ser Ala Arg 100 105 Ile Gln Ile Phe Leu Thr Phe Cys Lys Leu Thr Ala Ile Leu Ile Ile 120 125 Ile Val Pro Gly Val Met Gln Leu Ile Lys Gly Gln Thr Gln Asn Phe 135 140 Lys Asp Ala Phe Ser Gly Arg Asp Ser Ser Ile Thr Arg Leu Pro Leu 150 155 Ala Phe Tyr Tyr Gly Met Tyr Ala Tyr Ala Gly Trp Phe Tyr Leu Asn 165 170 Phe Val Thr Glu Glu Val Glu Asn Pro Glu Lys Thr Ile Pro Leu Ala 185 Ile Cys Ile Ser Met Ala Ile Val Thr Ile Gly Tyr Val Leu Thr Asn 200 Val Ala Tyr Phe Thr Thr Ile Asn Ala Glu Glu Leu Leu Ser Asn 215 220 Ala Val Ala Val Thr Phe Ser Glu Arg Leu Leu Gly Asn Phe Ser Leu 230 235 240 Ala Val Pro Ile Phe Val Ala Leu Ser Cys Phe Gly Ser Met Asn Gly 245 250 Gly Val Phe Ala Val Ser Arg Leu Phe Tyr Val Ala Ser Arg Glu Gly 265 His Leu Pro Glu Ile Leu Ser Met Ile His Val Arg Lys His Thr Pro Leu Pro Ala Val Ile Val Leu His Pro Leu Thr Met Ile Met Leu Phe 295 300 Ser Gly Asp Leu Asp Ser Leu Leu Asn Phe Leu Ser Phe Ala Arg Trp 310 315 Leu Phe Ile Gly Leu Ala Val Ala Gly Leu Ile Tyr Leu Arg Tyr Lys 330 325 Cys Pro Asp Met His Arg Pro Phe Lys Val Pro Leu Phe Ile Pro Ala 345 Leu Phe Ser Phe Thr Cys Leu Phe Met Val Ala Leu Ser Leu Tyr Ser 360 Asp Pro Phe Ser Thr Gly Ile Gly Phe Val Ile Thr Leu Thr Gly Val 375 380 Pro Ala Tyr Tyr Leu Phe Ile Ile Trp Asp Lys Lys Pro Arg Trp Phe 390 395

Arg Ile Met Ser Glu Lys Ile Thr Arg Thr Leu Gln Ile Ile Leu Glu
405
410
415

Val Val Pro Glu Glu Asp Lys Leu *
420
424

<210> 1440 <211> 70 <212> PRT <213> Homo sapiens

<210> 1441 <211> 1691 <212> PRT <213> Homo sapiens

<400> 1441 Met Trp Ser Leu His Ile Val Leu Met Arg Cys Ser Phe Arg Leu Thr 10 Lys Ser Leu Ala Thr Gly Pro Trp Ser Leu Ile Leu Ile Leu Phe Ser 25 Val Gln Tyr Val Tyr Gly Ser Gly Lys Lys Tyr Ile Gly Pro Cys Gly 40 Gly Arg Asp Cys Ser Val Cys His Cys Val Pro Glu Lys Gly Ser Arg 55 60 Gly Pro Pro Gly Pro Gly Pro Gln Gly Pro Ile Gly Pro Leu Gly 75 Ala Pro Gly Pro Ile Gly Leu Ser Gly Glu Lys Gly Met Arg Gly Asp Arg Gly Pro Pro Gly Ala Ala Gly Asp Lys Gly Asp Lys Gly Pro Thr 105 110 Gly Val Pro Gly Phe Pro Gly Leu Asp Gly Ile Pro Gly His Pro Gly 120 125 Pro Pro Gly Pro Arg Gly Lys Pro Gly Met Ser Gly His Asn Gly Ser 135 140 Arg Gly Asp Pro Gly Phe Pro Gly Gly Arg Gly Ala Leu Gly Pro Gly 155 160 Gly Pro Leu Gly His Pro Gly Glu Lys Gly Glu Lys Gly Asn Ser Val 170 Phe Ile Leu Gly Ala Val Lys Gly Ile Gln Gly Asp Arg Gly Asp Pro 180 185 Gly Leu Pro Gly Leu Pro Gly Ser Trp Gly Ala Gly Gly Pro Ala Gly

| ٠ | | 195 | | | | | 200 | | | | | 205 | | | |
|------------|------------|-----|------------|------------|------------|------------|-----|------------|------------|------------|------------|-----|-----|------------|------------|
| Pro | Thr 210 | Gly | Tyr | Pro | Gly | Glu 215 | Pro | Gly | Leu | Val | Gly 220 | Pro | Pro | Gly | Gln |
| Pro 225 | Gly | Arg | Pro | Gly | Leu 230 | Lys | Gly | Asn | Pro | Gly 235 | Val | Gly | Val | Lys | Gly 240 |
| Gln | Met | Gly | Asp | Pro 245 | Gly | Glu | Val | Gly | Gln 250 | Gln | Gly | Ser | Pro | Gly 255 | Pro |
| | | | Val 260 | | | | | 265 | | | _ | _ | 270 | | _ |
| | | 275 | Gly | | | | 280 | | | | | 285 | | | _ |
| | 290 | | Glu | | | 295 | | | | | 300 | | | | |
| 305 | | | Gly | | 310 | | | | | 315 | | | | | 320 |
| | | | Leu | 325 | | | | | 330 | | _ | _ | | 335 | |
| | | | Ile 340 | | | | | 345 | | | | | 350 | | |
| | | 355 | Gly | | | | 360 | | | | | 365 | _ | _ | |
| | 370 | | Pro | | | 375 | | | | | 380 | | _ | | |
| 385 | | | Gly | | 390 | | | | | 395 | | | | | 400 |
| | | | Ile | 405 | | | | | 410 | | | | | 415 | |
| | | | Gly 420 | | | | | 425 | | | | | 430 | | |
| | | 435 | Gly | | | | 440 | | | | | 445 | | | |
| | 450 | | Leu | | | 455 | | | | | 460 | | | _ | |
| 465 | | | Gln | | 470 | | | | | 475 | | | | _ | 480 |
| | | | Gly | 485 | | | | | 490 | | _ | | _ | 495 | |
| | | | Gly 500 | | | | | 505 | | | | | 510 | | _ |
| | | 515 | Asp | | | | 520 | _ | _ | | - | 525 | - | _ | - |
| | 530 | | Pro | | | 535 | | | | | 540 | | _ | _ | |
| 545 | | | Gly | | 550 | | | _ | | 555 | _ | _ | _ | | 560 |
| | | | Val | 565 | | | | | 570 | | | | | 575 | |
| | | | Pro 580 | _ | | | _ | 585 | | _ | | _ | 590 | | |
| | | 595 | Gly | | | | 600 | | | | | 605 | | | |
| | 610 | | Lys | | | 615 | _ | | | - | 620 | | _ | _ | |
| 625 | | | Gly | | 630 | | | | | 635 | | | | | 640 |
| | | | Pro | 645 | | | - | | 650 | | | _ | _ | 655 | _ |
| дТĀ | ren | гÀа | Gly 660 | GIN | пуѕ | стХ | qaa | Thr 665 | тте | ser | cys | asn | 670 | rnr | ıyr |

Pro Gly Arg His Gly Pro Pro Gly Phe Asp Gly Pro Pro Gly Pro Lys 675 680 Gly Phe Pro Gly Pro Gln Gly Ala Pro Gly Leu Ser Gly Ser Asp Gly 695 His Lys Gly Arg Pro Gly Thr Pro Gly Thr Ala Glu Ile Pro Gly Pro 710 715 Pro Gly Phe Arg Gly Asp Met Gly Asp Pro Gly Phe Gly Glu Lys 725 730 Gly Ser Ser Pro Val Gly Pro Pro Gly Pro Pro Gly Ser Pro Gly Val 740 745 750 Asn Gly Gln Lys Gly Ile Pro Gly Asp Pro Ala Phe Gly His Leu Gly 755 760 Pro Pro Gly Lys Arg Gly Leu Ser Gly Val Pro Gly Ile Lys Gly Pro 775 780 Arg Gly Asp Pro Gly Cys Pro Gly Ala Glu Gly Pro Ala Gly Ile Pro 790 795 Gly Phe Leu Gly Leu Lys Gly Pro Lys Gly Arg Glu Gly His Ala Gly 805 810 Phe Pro Gly Val Pro Gly Pro Pro Gly His Ser Cys Glu Arg Gly Ala 820 825 Pro Gly Ile Pro Gly Gln Pro Gly Leu Pro Gly Tyr Pro Gly Ser Pro 835 840 Gly Ala Pro Gly Gly Lys Gly Gln Pro Gly Asp Val Gly Pro Pro Gly 855 860 Pro Ala Gly Met Lys Gly Leu Pro Gly Leu Pro Gly Arg Pro Gly Ala 875 870 His Gly Pro Pro Gly Leu Pro Gly Ile Pro Gly Pro Phe Gly Asp Asp 890 Gly Leu Pro Gly Pro Pro Gly Pro Lys Gly Pro Arg Gly Leu Pro Gly 900 905 Phe Pro Gly Phe Pro Gly Glu Arg Gly Lys Pro Gly Ala Glu Gly Cys 915 920 925 Pro Gly Ala Lys Gly Glu Pro Gly Glu Lys Gly Met Ser Gly Leu Pro 935 940 Gly Asp Arg Gly Leu Arg Gly Ala Lys Gly Ala Ile Gly Pro Pro Gly 950 955 Asp Glu Gly Glu Met Ala Ile Ile Ser Gln Lys Gly Thr Pro Gly Glu 965 970 Pro Gly Pro Pro Gly Asp Asp Gly Phe Pro Gly Glu Arg Gly Asp Lys 980 985 990 Gly Thr Pro Gly Met Gln Gly Arg Arg Gly Glu Leu Gly Arg Tyr Gly 995 1000 1005 Pro Pro Gly Phe His Arg Gly Glu Pro Gly Glu Lys Gly Gln Pro Gly 1015 1020 Pro Pro Gly Pro Pro Gly Pro Pro Gly Ser Thr Gly Leu Arg Gly Phe 1030 1035 Ile Gly Phe Pro Gly Leu Pro Gly Asp Gln Gly Glu Pro Gly Ser Pro 1045 1050 Gly Pro Pro Gly Phe Ser Gly Ile Asp Gly Ala Arg Gly Pro Lys Gly 1060 1065 1070 Asn Lys Gly Asp Pro Ala Ser His Phe Gly Pro Pro Gly Pro Lys Gly 1080 1085 Glu Pro Gly Ser Pro Gly Cys Pro Gly His Phe Gly Ala Ser Gly Glu 1095 1100 Gln Gly Leu Pro Gly Ile Gln Gly Pro Arg Gly Ser Pro Gly Arg Pro 1110 1115 Gly Pro Pro Gly Ser Ser Gly Pro Pro Gly Cys Pro Gly Asp His Gly 1125 1130 Met Pro Gly Leu Arg Gly Gln Pro Gly Glu Met Gly Asp Pro Gly Pro

1140 1145 Arg Gly Leu Gln Gly Asp Pro Gly Ile Pro Gly Pro Pro Gly Ile Lys 1155 1160 1165 Gly Pro Ser Gly Ser Pro Gly Leu Asn Gly Leu His Gly Leu Lys Gly 1170 1175 1180 Gln Lys Gly Thr Lys Gly Ala Ser Gly Leu His Asp Val Gly Pro Pro 1185 1190 1195 1200 Gly Pro Val Gly Ile Pro Gly Leu Lys Gly Glu Arg Gly Asp Pro Gly 1205 1210 1215 Ser Pro Gly Ile Ser Pro Pro Gly Pro Arg Gly Lys Lys Gly Pro Pro 1220 1225 1230 Gly Pro Pro Gly Ser Ser Gly Pro Pro Gly Pro Ala Gly Ala Thr Gly 1235 1240 1245 Arg Ala Pro Lys Asp Ile Pro Asp Pro Gly Pro Pro Gly Asp Gln Gly 1250 1255 1260 Pro Pro Gly Pro Asp Gly Pro Arg Gly Ala Pro Gly Pro Pro Gly Leu 1265 1270 1275 Pro Gly Ser Val Asp Leu Leu Arg Gly Glu Pro Gly Asp Cys Gly Leu 1285 1290 1295 Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Tyr Lys . 1300 1305 1310 Gly Phe Pro Gly Cys Asp Gly Lys Asp Gly Gln Lys Gly Pro Val Gly 1315 1320 1325 Phe Pro Gly Pro Gln Gly Pro His Gly Phe Pro Gly Pro Pro Gly Glu 1330 1335 1340 Lys Gly Leu Pro Gly Pro Pro Gly Arg Lys Gly Pro Thr Gly Leu Pro 1345 1350 1355 1360 Gly Pro Arg Gly Glu Pro Gly Pro Pro Ala Asp Val Asp Asp Cys Pro 1365 1370 1375 Arg Ile Pro Gly Leu Pro Gly Ala Pro Gly Met Arg Gly Pro Glu Gly 1380 1385 1390 Ala Met Gly Leu Pro Gly Met Arg Gly Pro Ser Gly Pro Gly Cys Lys 1395 1400 1405 Gly Glu Pro Gly Leu Asp Gly Arg Arg Gly Val Asp Gly Val Pro Gly 1415 1420 Ser Pro Gly Pro Pro Gly Arg Lys Gly Asp Thr Gly Glu Asp Gly Tyr 1425 1430 1435 1440 Pro Gly Gly Pro Gly Pro Gly Pro Ile Gly Asp Pro Gly Pro Lys 1445 1450 1455 Gly Phe Gly Pro Gly Tyr Leu Gly Gly Phe Leu Leu Val Leu His Ser 1460 1465 1470 Gln Thr Asp Gln Glu Pro Thr Cys Pro Leu Gly Met Pro Arg Leu Trp 1475 1480 1485 Thr Gly Tyr Ser Leu Leu Tyr Leu Glu Gly Gln Glu Lys Ala His Asn. 1490 1495 1500 Gln Asp Leu Gly Leu Ala Gly Ser Cys Leu Pro Val Phe Ser Thr Leu 1505 1510 1515 1520 Pro Phe Ala Tyr Cys Asn Ile His Gln Val Cys His Tyr Ala Gln Arg 1525 1530 1535 Asn Asp Arg Ser Tyr Trp Leu Ala Ser Ala Ala Pro Leu Pro Met Met 1540 1545 1550 Pro Leu Ser Glu Glu Ala Ile Arg Pro Tyr Val Ser Arg Cys Ala Val 1560 1565 Cys Glu Ala Pro Ala Gln Ala Val Ala Val His Ser Gln Asp Gln Ser 1570 1575 1580 Ile Pro Pro Cys Pro Gln Thr Trp Arg Ser Leu Trp Ile Gly Tyr Ser 1585 1590 1595 1600 Phe Leu Met His Thr Gly Ala Gly Asp Gln Gly Gly Gln Ala Leu 1605 1610

 Met
 Ser
 Pro
 Gly
 Ser
 Cys
 Leu
 Glu
 Asp
 Phe
 Arg
 Ala
 Ala
 Pro
 Phe
 Leu
 Leu
 I630
 Leu
 I630
 I630
 I630
 I630
 I630
 I630
 I630
 I630
 I630
 I640
 I645
 I660
 I660
 I660
 I660
 I660
 I660
 I660
 I670
 I675
 I680
 I680
 I680
 I680
 I680
 I680
 I680
 I680
 I690
 I690

<210> 1442 <211> 153 <212> PRT <213> Homo sapiens

<400> 1442 Met Gly Val Met Ala Pro Arg Thr Leu Leu Leu Leu Leu Leu Gly Ala 1 5 Leu Ala Leu Thr Glu Thr Trp Ala Gly Glu Cys Gly Val Gly Arg Glu 25 Arg Ala Ser Ala Gly Arg Ser Glu Trp Pro Ala Arg Pro Gly Glu Pro 40 Arg Arg Glu Glu Gly Arg Ala Gly Leu Ser Leu Ser Ser Pro Pro Gly 50 55 60 Ser His Ser Leu Arg Tyr Phe Ser Thr Ala Val Ser Gln Pro Gly Arg 70 75 Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp Thr Glu Phe 90 Val Arg Phe Asp Ser Asp Ser Val Ser Pro Arg Met Glu Arg Arg Ala 100 105 110 Pro Trp Val Glu Gln Glu Gly Leu Glu Tyr Trp Asp Gln Glu Thr Arg 115 120 125 Asn Ala Lys Gly His Ala Gln Ile Tyr Arg Val Asn Leu Arg Thr Leu 130 135

153

<210> 1443 <211> 58 <212> PRT <213> Homo sapiens

Leu Arg Tyr Tyr Asn Gln Ser Glu Ala

150

<400> 1443

<210> 1444 <211> 69 <212> PRT <213> Homo sapiens

<210> 1445 <211> 826 <212> PRT <213> Homo sapiens

<400> 1445 Met Gly Trp Leu Cys Ser Gly Leu Leu Phe Pro Val Ser Cys Leu Val 10 Leu Leu Gln Val Ala Ser Ser Gly Asn Met Lys Val Leu Gln Glu Pro 25 Thr Cys Val Ser Asp Tyr Met Ser Ile Ser Thr Cys Glu Trp Lys Met 40 Asn Gly Pro Thr Asn Cys Ser Thr Glu Leu Arg Leu Leu Tyr Gln Leu 50 55 Val Phe Leu Leu Ser Glu Ala His Thr Cys Val Pro Glu Asn Asn Gly 65 70 75 80 Gly Ala Gly Cys Val Cys His Leu Leu Met Asp Asp Val Val Ser Ala 85 90 Asp Asn Tyr Thr Leu Asp Leu Trp Ala Gly Gln Gln Leu Leu Trp Lys 105 Gly Ser Phe Lys Pro Ser Glu His Val Lys Pro Arg Ala Pro Gly Asn 120 125 Leu Thr Val His Thr Asn Val Ser Asp Thr Leu Leu Leu Thr Trp Ser 130 135 Asn Pro Tyr Pro Pro Asp Asn Tyr Leu Tyr Asn His Leu Thr Tyr Ala 145 150 155 160 Val Asn Ile Trp Ser Glu Asn Asp Pro Ala Asp Phe Arg Ile Tyr Asn 165 170 Val Thr Tyr Leu Glu Pro Ser Leu Arg Ile Ala Ala Ser Thr Leu Lys 180 185 190 Ser Gly Ile Ser Tyr Arg Ala Arg Val Arg Ala Trp Ala Gln Cys Tyr 200 Asn Thr Thr Trp Ser Glu Trp Ser Pro Ser Thr Lys Trp His Asn Ser 215 220 Tyr Arg Glu Pro Phe Glu Gln His Leu Leu Gly Val Ser Val Ser 225 230 235

Cys Ile Val Ile Leu Ala Val Cys Leu Leu Cys Tyr Val Ser Ile Thr 245 250 . 255 Lys Ile Lys Lys Glu Trp Trp Asp Gln Ile Pro Asn Pro Ala Arg Ser Arg Leu Val Ala Ile Ile Ile Gln Asp Ala Gln Gly Ser Gln Trp Glu 280 Lys Arg Ser Arg Gly Gln Glu Pro Ala Lys Cys Pro His Trp Lys Asn 295 Cys Leu Thr Lys Leu Pro Cys Phe Leu Glu His Asn Met Lys Arq 310 315 Asp Glu Asp Pro His Lys Ala Ala Lys Glu Met Pro Phe Gln Gly Ser 330 Gly Lys Ser Ala Trp Cys Pro Val Glu Ile Ser Lys Thr Val Leu Trp 345 Pro Glu Ser Ile Ser Val Val Arg Cys Val Glu Leu Phe Glu Ala Pro 360 Val Glu Cys Glu Glu Glu Glu Glu Glu Glu Glu Lys Gly Ser Phe 375 380 Cys Ala Ser Pro Glu Ser Ser Arg Asp Asp Phe Gln Glu Gly Arg Glu 390 395 Gly Ile Val Ala Arg Leu Thr Glu Ser Leu Phe Leu Asp Leu Leu Gly 405 410 Glu Glu Asn Gly Gly Phe Cys Gln Gln Asp Met Gly Glu Ser Cys Leu 420 425 Leu Pro Pro Ser Gly Ser Thr Ser Ala His Met Pro Trp Asp Glu Phe 440 Pro Ser Ala Gly Pro Lys Glu Ala Pro Pro Trp Gly Lys Glu Gln Pro 455 460 Leu His Leu Glu Pro Ser Pro Pro Ala Ser Pro Thr Gln Ser Pro Asp 470 475 Asn Leu Thr Cys Thr Glu Thr Pro Leu Val Ile Ala Gly Asn Pro Ala 485 490 Tyr Arg Ser Phe Ser Asn Ser Leu Ser Gln Ser Pro Cys Pro Arg Glu 500 505 Leu Gly Pro Asp Pro Leu Leu Ala Arg His Leu Glu Glu Val Glu Pro 520 525 Glu Met Pro Cys Val Pro Gln Leu Ser Glu Pro Thr Thr Val Pro Gln 535 540 Pro Glu Pro Glu Thr Trp Glu Gln Ile Leu Arg Arg Asn Val Leu Gln 550 555 His Gly Ala Ala Ala Pro Val Ser Ala Pro Thr Ser Gly Tyr Gln 565 570 Glu Phe Val His Ala Val Glu Gln Gly Gly Thr Gln Ala Ser Ala Val 585 Val Gly Leu Gly Pro Pro Gly Glu Ala Gly Tyr Lys Ala Phe Ser Ser 600 Leu Leu Ala Ser Ser Ala Val Ser Pro Glu Lys Cys Gly Phe Gly Ala 615 620 Ser Ser Gly Glu Glu Gly Tyr Lys Pro Phe Gln Asp Leu Ile Pro Gly 630 635 Cys Pro Gly Asp Pro Ala Pro Val Pro Leu Phe Thr Phe Gly 645 650 Leu Asp Arg Glu Pro Pro Arg Ser Pro Gln Ser Ser His Leu Pro Ser 665 Ser Ser Pro Glu His Leu Gly Leu Glu Pro Gly Glu Lys Val Glu Asp 680 Met Pro Lys Pro Pro Leu Pro Gln Glu Gln Ala Thr Asp Pro Leu Val 695 Asp Ser Leu Gly Ser Gly Ile Val Tyr Ser Ala Leu Thr Cys His Leu

715 710 Cys Gly His Leu Lys Gln Cys His Gly Gln Glu Asp Gly Gln Thr 725 730 Pro Val Met Ala Ser Pro Cys Cys Gly Cys Cys Gly Asp Arg Ala 740 745 Ser Pro Pro Thr Thr Pro Leu Arg Ala Pro Asp Pro Ser Pro Gly Gly 755 760 765 Val Pro Leu Glu Ala Ser Leu Cys Pro Ala Ser Leu Ala Pro Ser Gly 770 775 780 Ile Ser Glu Lys Ser Lys Ser Ser Ser Ser Phe His Pro Ala Pro Gly 790 795 800 Asn Ala Gln Ser Ser Ser Gln Thr Pro Lys Ile Val Asn Phe Val Ser 805 810 Val Gly Pro Thr Tyr Met Arg Val Ser *

<210> 1446 <211> 367 <212> PRT <213> Homo sapiens

<400> 1446 Met Ala Leu Arg Phe Leu Leu Gly Phe Leu Leu Ala Gly Val Asp Leu Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu 20 25 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu 40 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg 55 Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu 85 90 Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His 100 105 110 Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu 120 125 Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu 135 Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr 150 Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly 165 170 175 Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly 185 190 Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe 200 205 Gly Arg Arg Gly Ile Leu Leu Ser Met Thr Leu Thr Gly Ile Ala 215 220 Ser Leu Val Leu Leu Gly Leu Trp Asp Tyr Leu Asn Glu Ala Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala Ala Ile 245 250 Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val Arg Gly 260 265 270

 Arg
 Gly
 Leu
 Gly
 Leu
 Ile
 Met
 Ala
 Leu
 Gly
 Ala
 Phe
 Leu
 Gly
 Ala

 Gly
 Pro
 Ala
 Gln
 Arg
 Leu
 His
 Met
 Gly
 His
 Gly
 Ala
 Phe
 Leu
 Gln
 His
 Met
 Leu
 Ala
 Phe
 Leu
 Ala
 Ala
 Ala
 Leu
 Leu
 Leu
 Cys
 Ile
 Leu
 Ser
 Ile
 Met
 Leu
 Ala
 A

<210> 1447 <211> 79 <212> PRT <213> Homo sapiens

<400> 1447

 Met Ala Ile Ser Trp Leu Gly Thr Trp Leu Leu Gln Ser His Arg His 1
 5
 10
 10
 15
 15

 Trp Ser Glu Pro Gln Leu Cys Arg Leu Pro Ala Arg His His Leu Ile 20
 25
 30
 30

 Asn Leu Asn Phe Met Val Ala Glu Gly Ile Gly Asp Arg Ala Trp His 35
 40
 45

 Ile Ile Ser Ala Gln Leu Phe Met Thr Phe Ser Phe His Ala Val Ile 50
 55
 60

 Leu Gln Thr Asp Leu Gly Glu Ala Gly Lys Tyr Lys Asp Lys *
 75
 78

<210> 1448 <211> 276 <212> PRT <213> Homo sapiens

<400> 1448

Met Val Trp Val Val Leu Leu Ser Leu Leu Cys Tyr Leu Val Leu Phe 10 Leu Cys Arg His Ser Ser His Arg Gly Val Phe Leu Ser Val Thr Ile 20 25 Leu Ile Tyr Leu Leu Met Gly Glu Met His Met Val Asp Thr Val Thr 35 40 Trp His Lys Met Arg Gly Ala Gln Met Ile Val Ala Met Lys Ala Val 55 Ser Leu Gly Phe Asp Leu Asp Arg Gly Glu Val Gly Thr Val Pro Ser 70 75 Pro Val Glu Phe Met Gly Tyr Leu Tyr Phe Val Gly Thr Ile Val Phe 90 Gly Pro Trp Ile Ser Phe His Ser Tyr Leu Gln Ala Val Gln Gly Arg 105 110 Pro Leu Ser Cys Arg Trp Leu Gln Lys Val Ala Arg Ser Leu Ala Leu 120 Ala Leu Leu Cys Leu Val Leu Ser Thr Cys Val Gly Pro Tyr Leu Phe

130 135 140 Pro Tyr Phe Ile Pro Leu Asn Gly Asp Arg Leu Leu Arg Lys Trp Leu 150 155 . 160 Arg Ala Tyr Glu Ser Ala Val Ser Phe His Phe Ser Asn Tyr Phe Val 165 170 175 Gly Phe Leu Ser Glu Ala Thr Ala Thr Leu Ala Gly Ala Gly Phe Thr 180 185 190 Glu Glu Lys Asp His Leu Glu Trp Asp Leu Thr Val Ser Lys Pro Leu 200 205 Asn Val Glu Leu Pro Arg Ser Met Val Glu Val Val Thr Ser Trp Asn 210 215 220 Leu Pro Met Ser Tyr Trp Leu Asn Asn Tyr Gly Phe Lys Asn Ala Leu 225 230 235 Arg Leu Gly Thr Leu Leu Gly Cys Ala Gly His Leu Cys Ser Gln Arg 245 250 Pro Ser Lys Leu Leu Lys Phe Pro Pro Gly Trp Gly Pro Cys Cys Pro 260 265 Gly Phe Leu * 275

<210> 1449 <211> 597 <212> PRT

<213> Homo sapiens

<400> 1449 Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Lys Gly 10 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln 25 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe 40 Ser Ser Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 55 Val Trp Val Ser Arg Ile Asn Thr Asp Gly Ser Ser Thr Ser Tyr Ala 70 75 80 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val 100 105 110 Tyr Tyr Cys Ala Arg Ala Asp Asn Cys Ser Ser Thr Ser Cys Tyr Lys 120 Cys Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly 135 140 Ser Ala Ser Ala Pro Thr Leu Phe Pro Leu Val Ser Cys Glu Asn Ser 145 150 155 Pro Ser Asp Thr Ser Ser Val Ala Val Gly Cys Leu Ala Gln Asp Phe 170 Leu Pro Asp Ser Ile Thr Phe Ser Trp Lys Tyr Lys Asn Asn Ser Asp 180 185 Ile Ser Ser Thr Arg Gly Phe Pro Ser Val Leu Arg Gly Gly Lys Tyr 195 200 Ala Ala Thr Ser Gln Val Leu Leu Pro Ser Lys Asp Val Met Gln Gly 210 215 220 Thr Asp Glu His Val Val Cys Lys Val Gln His Pro Asn Gly Asn Lys 230 235

```
Glu Lys Asn Val Pro Leu Pro Val Ile Ala Glu Leu Pro Pro Lys Val
             245
                   250 255
Ser Val Phe Val Pro Pro Arg Asp Gly Phe Phe Gly Asn Pro Arg Lys
                             265
Ser Lys Leu Ile Cys Gln Ala Thr Gly Phe Ser Pro Arg Gln Ile Gln
                          280
Val Ser Trp Leu Arg Glu Gly Lys Gln Val Gly Ser Gly Val Thr Thr
                      295
Asp Gln Val Gln Ala Glu Ala Lys Glu Ser Gly Pro Thr Thr Tyr Lys
                  310
                                     315
Val Thr Ser Thr Leu Thr Ile Lys Glu Ser Asp Trp Leu Ser Gln Ser
                                 330
Met Phe Thr Cys Arg Val Asp His Arg Gly Leu Thr Phe Gln Gln Asn
           340
                             345
Ala Ser Ser Met Cys Val Pro Asp Gln Asp Thr Ala Ile Arg Val Phe
                          360
Ala Ile Pro Pro Ser Phe Ala Ser Ile Phe Leu Thr Lys Ser Thr Lys
                     375
                                        380
Leu Thr Cys Leu Val Thr Asp Leu Thr Thr Tyr Asp Ser Val Thr Ile
                 390
                                    395
Ser Trp Thr Arg Gln Asn Gly Glu Ala Val Lys Thr His Thr Asn Ile
                                410
Ser Glu Ser His Pro Asn Ala Thr Phe Ser Ala Val Gly Glu Ala Ser
                            425
Ile Cys Glu Asp Asp Trp Asn Ser Gly Glu Arg Phe Thr Cys Thr Val
                         440
Thr His Thr Asp Leu Pro Ser Pro Leu Lys Gln Thr Ile Ser Arg Pro
                     455
                                     460
Lys Gly Val Ala Leu His Arg Pro Asp Val Tyr Leu Leu Pro Pro Ala
         470
                                    475
Arg Glu Gln Leu Asn Leu Arg Glu Ser Ala Thr Ile Thr Cys Leu Val
                                 490
Thr Gly Phe Ser Pro Ala Asp Val Phe Val Gln Trp Met Gln Arq Gly
          500
                          505
Gln Pro Leu Ser Pro Glu Lys Tyr Val Thr Ser Ala Pro Met Pro Glu
                        520
                                         525
Pro Gln Ala Pro Gly Arg Tyr Phe Ala His Ser Ile Leu Thr Val Ser
                    535
                              540
Glu Glu Glu Trp Asn Thr Gly Glu Thr Tyr Thr Cys Val Val Ala His
                 550
                                   555
Glu Ala Leu Pro Asn Arg Val Thr Glu Arg Thr Val Asp Lys Ser Thr
       565
                    570
Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val Met Ser Asp Thr Ala
          580
                      585
Gly Thr Cys Tyr *
       595 596
```

<210> 1450 <211> 276 <212> PRT <213> Homo sapiens

<400> 1450

Met Pro Ala Leu Arg Pro Ala Leu Leu Trp Ala Leu Leu Ala Leu Trp

1 5 10 15

Leu Cys Cys Ala Thr Pro Ala His Ala Leu Gln Cys Arg Asp Gly Tyr

25 Glu Pro Cys Val Asn Glu Gly Met Cys Val Thr Tyr His Asn Gly Thr 35 40 Gly Tyr Cys Lys Cys Pro Glu Gly Phe Leu Gly Glu Tyr Cys Gln His 55 Arg Asp Pro Cys Glu Lys Asn Arg Cys Gln Asn Gly Gly Thr Cys Val 70 Ala Gln Ala Met Leu Gly Lys Ala Thr Cys Arg Cys Ala Ser Gly Phe 90 Thr Gly Glu Asp Cys Gln Tyr Ser Thr Ser His Pro Cys Phe Val Ser 105 Arg Pro Cys Leu Asn Gly Gly Thr Cys His Met Leu Ser Arg Asp Thr 120 125 Tyr Glu Cys Thr Cys Gln Val Gly Phe Thr Gly Lys Glu Cys Gln Trp 135 140 Thr Asp Ala Cys Leu Ser His Pro Cys Ala Asn Gly Ser Thr Cys Thr 150 Thr Val Ala Asn Gln Phe Ser Cys Lys Cys Leu Thr Gly Phe Thr Gly 165 170 Gln Lys Cys Glu Thr Asp Val Asn Glu Cys Asp Ile Pro Gly His Cys 180 185 Gln His Gly Gly Ile Cys Leu Asn Leu Pro Gly Ser Tyr Gln Cys Gln 200 205 Cys Leu Gln Gly Phe Thr Gly Gln Tyr Cys Asp Ser Leu Tyr Val Pro 215 220 Cys Ala Pro Ser Pro Cys Val Asn Gly Gly Thr Cys Arg Gln Thr Gly 230 235 Asp Phe Thr Phe Glu Cys Asn Cys Leu Pro Glu Thr Val Arg Arg Gly 245 250 Thr Glu Leu Trp Glu Arg Asp Arg Glu Val Trp Asn Gly Lys Glu His 265 Asp Glu Asn * 275

<210> 1451 <211> 121 <212> PRT <213> Homo sapiens

<400> 1451 Met Glu Ser Gly Leu Ser Trp Ile Phe Leu Leu Ala Ile Leu Lys Gly Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln 25 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Arg Phe 35 40 Asp Glu Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 55 Glu Trp Val Gly Gly Ile Ser Trp Asn Arg Asp Ser Ile Ala Tyr Ala 70 75 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Gln Ser 90 Tyr Val Tyr Leu Gln Met Asn Ser Leu Arg His Glu Asp Thr Ala Leu Tyr Tyr Cys Thr Lys Leu Arg Ser Ser

<210> 1452 <211> 48 <212> PRT <213> Homo sapiens

<400> 1452 Met Glu Arg Gly Asn Ala Leu Val Val Leu Arg Ser Leu Leu Trp Pro 1 5 . 10 Gly Leu Thr Phe Tyr His Ala Pro Arg Thr Lys Asn Tyr Gly Tyr Val 25 Tyr Val Gly Thr Gly Glu Lys Asn Met Asp Leu Pro Phe Met Leu *

<210> 1453 <211> 123 <212> PRT <213> Homo sapiens

<400> 1453 Met Ile Thr Val Gln Phe Ser Tyr Thr Ala Val Lys Trp Leu Leu Asn 5 Cys Phe Val Leu Ile Leu Tyr Val Ile Leu Ser Ile Leu Phe Gln Val 25 Ser Gln Lys Asn Ser Ser Lys Leu Gly Arg Phe Lys Asn Leu Phe Asn His Lys Glu Cys Ser Lys Leu Leu Phe Asn Arg Asn Gln Ala Gln Thr 55 Leu Glu Leu Thr Ala Asp Arg Ile Arg Phe Gly Leu Phe Pro Glu Trp . 70 75 Lys His Phe Ser His Thr Thr Ser Leu Cys Thr Ala Lys Met Leu Ala 90 Tyr Pro Leu Trp Phe Pro Ser Phe Ser Leu Ala Ser Gln Arg Asn Leu 100 105 Pro Pro His Pro Leu Tyr Tyr Ile Phe Tyr * 120 122

<210> 1454 <211>.327 <212> PRT <213> Homo sapiens

<400> 1454 Met Arg Glu Trp Trp Val Gln Val Gly Leu Leu Ala Val Pro Leu Leu 10 Ala Ala Tyr Leu His Ile Pro Pro Pro Gln Leu Ser Pro Ala Leu His 25 Ser Trp Lys Ser Ser Gly Lys Phe Phe Thr Tyr Lys Gly Leu Arg Ile Phe Tyr Gln Asp Ser Val Gly Val Val Gly Ser Pro Glu Ile Val Val

```
50
                  55
                                60
Leu Leu His Gly Phe Pro Thr Ser Ser Tyr Asp Trp Tyr Lys Ile Trp
                     75
        70
Glu Gly Leu Thr Leu Arg Phe His Arg Val Ile Ala Leu Asp Phe Leu
                90
Gly Phe Gly Phe Ser Asp Lys Pro Arg Pro His His Tyr Ser Ile Phe
        100 105
Glu Gln Ala Ser Ile Val Glu Ala Leu Leu Arg His Leu Gly Leu Gln
 115 120 125
Asn Arg Arg Ile Asn Leu Leu Ser His Asp Tyr Gly Asp Ile Val Ala
 130 135 140
Gln Glu Leu Leu Tyr Arg Tyr Lys Gln Asn Arg Ser Gly Arg Leu Thr
                   155
145 150
Ile Lys Ser Leu Cys Leu Ser Asn Gly Gly Ile Phe Pro Glu Thr His
          165
                         170 175
Arg Pro Leu Leu Gln Lys Leu Leu Lys Asp Gly Gly Val Leu Ser
        180 185
Pro Ile Leu Thr Arg Leu Met Asn Phe Phe Val Phe Ser Arg Gly Leu
                    200
                                  205
Thr Pro Val Phe Gly Pro Tyr Thr Arg Pro Ser Glu Ser Glu Leu Trp
                 215
                               220
Asp Met Trp Ala Gly Ile Arg Asn Asp Gly Asn Leu Val Ile Asp
225 230
                           235
Ser Leu Leu Gln Tyr Ile Asn Gln Arg Lys Lys Phe Arg Arg Trp
      245
                         250
Val Gly Ala Leu Ala Ser Val Thr Ile Pro Ile His Phe Ile Tyr Gly
       260 265 270
Pro Leu Asp Pro Val Asn Pro Tyr Pro Glu Phe Leu Glu Leu Tyr Arg
    275 280
                         285
Lys Thr Leu Pro Arg Ser Thr Val Ser Ile Leu Asp Asp His Ile Ser
 290 295
                           300
His Tyr Pro Gln Leu Glu Asp Pro Met Gly Phe Leu Asn Ala Tyr Met
305 310
                     315
Gly Phe Ile Asn Ser Phe *
           325 326
```

<210> 1455 <211> 57 <212> PRT <213> Homo sapiens

<210> 1456 <211> 48 <212> PRT

<213> Homo sapiens

<210> 1457 <211> 459 <212> PRT <213> Homo sapiens

-

<400> 1457 Met Ser Asp Leu Leu Ser Val Phe Leu His Leu Leu Leu Phe Lys 1 5 Leu Val Ala Pro Val Thr Phe Arg His His Arg Tyr Asp Asp Leu Val 20 25 Arg Thr Leu Tyr Lys Val Gln Asn Glu Cys Pro Gly Ile Thr Arg Val 40 Tyr Ser Ile Gly Arg Ser Val Glu Gly Arg His Leu Tyr Val Leu Glu 55 60 Phe Ser Asp His Pro Gly Ile His Glu Pro Leu Glu Pro Glu Val Lys Tyr Val Gly Asn Met His Gly Asn Glu Ala Leu Gly Arg Glu Leu Met 90 Leu Gln Leu Ser Glu Phe Leu Cys Glu Glu Phe Arg Asn Arg Asn Gln 100 105 Arg Ile Val Gln Leu Ile Gln Asp Thr Arg Ile His Ile Leu Pro Ser 125 120 Met Asn Pro Asp Gly Tyr Glu Val Ala Ala Ala Gln Gly Pro Asn Lys 135 140 Pro Gly Tyr Leu Val Gly Arg Asn Asn Ala Asn Gly Val Asp Leu Asn 150 155 Arg Asn Phe Pro Asp Leu Asn Thr Tyr Ile Tyr Tyr Asn Glu Lys Tyr 165 170 175 Gly Gly Pro Asn His His Leu Pro Leu Pro Asp Asn Trp Lys Ser Gln 185 190 Val Glu Pro Glu Thr Arg Ala Val Ile Arg Trp Met His Ser Phe Asn 205 Phe Val Leu Ser Ala Asn Leu His Gly Gly Ala Val Val Ala Asn Tyr 215 Pro Tyr Asp Lys Ser Phe Glu His Arg Val Arg Gly Val Arg Arg Thr 230 235 Ala Ser Thr Pro Thr Pro Asp Asp Lys Leu Phe Gln Lys Leu Ala Lys 245 250 Val Tyr Ser Tyr Ala His Gly Trp Met Phe Gln Gly Trp Asn Cys Gly 265 Asp Tyr Phe Pro Asp Gly Ile Thr Asn Gly Ala Ser Trp Tyr Ser Leu 280 Ser Lys Gly Met Gln Asp Phe Asn Tyr Leu His Thr Asn Cys Phe Glu 295 Ile Thr Leu Glu Leu Ser Cys Asp Lys Phe Pro Pro Glu Glu Glu Leu

305 310 315 Gln Arg Glu Trp Leu Gly Asn Arg Glu Ala Leu Ile Gln Phe Leu Glu 330 Gln Val His Gln Gly Ile Lys Gly Met Val Leu Asp Glu Asn Tyr Asn 345 Asn Leu Ala Asn Ala Val Ile Ser Val Ser Gly Ile Asn His Asp Val 360 Thr Ser Gly Asp His Gly Asp Tyr Phe Arg Leu Leu Leu Pro Gly Ile 375 Tyr Thr Val Ser Ala Thr Ala Pro Gly Tyr Asp Pro Glu Thr Val Thr 390 395 Val Thr Val Gly Pro Ala Glu Pro Thr Leu Val Asn Phe His Leu Lys 410 405 Arg Ser Ile Pro Gln Val Ser Pro Val Arg Arg Ala Pro Ser Arg Arg 420 425 430 His Gly Val Arg Ala Lys Val Gln Pro Gln Pro Arg Lys Lys Glu Met 440 445 Glu Met Arg Gln Leu Gln Arg Gly Pro Ala * 455

<210> 1458 <211> 463 <212> PRT <213> Homo sapiens

<400> 1458 Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu 10 Cys Trp Ser Leu Ala Ile Ala Thr Pro Leu Pro Pro Thr Ser Ala His 25 Gly Asn Val Ala Glu Gly Glu Thr Lys Pro Asp Pro Asp Val Thr Glu 40 Arg Cys Ser Asp Gly Trp Ser Phe Asp Ala Thr Thr Leu Asp Asp Asn Gly Thr Met Leu Phe Phe Lys Gly Glu Phe Val Trp Lys Ser His Lys 70 Trp Asp Arg Glu Leu Ile Ser Glu Arg Trp Lys Asn Phe Pro Ser Pro 85 90 Val Asp Ala Ala Phe Arg Gln Gly His Asn Ser Val Phe Leu Ile Lys 105 110 Gly Asp Lys Val Trp Val Tyr Pro Pro Glu Lys Lys Glu Lys Gly Tyr 120 Pro Lys Leu Leu Gln Asp Glu Phe Pro Gly Ile Pro Ser Pro Leu Asp 135 Ala Ala Val Glu Cys His Arg Gly Glu Cys Gln Ala Glu Gly Val Leu 150 155 Phe Phe Gln Gly Asp Arg Glu Trp Phe Trp Asp Leu Ala Thr Gly Thr 175 165 170 Met Lys Glu Arg Ser Trp Pro Ala Val Gly Asn Cys Ser Ser Ala Leu 180 185 Arg Trp Leu Gly Arg Tyr Tyr Cys Phe Gln Gly Asn Gln Phe Leu Arg 200 Phe Asp Pro Val Arg Gly Glu Val Pro Pro Arg Tyr Pro Arg Asp Val 215 220 Arg Asp Tyr Phe Met Pro Cys Pro Gly Arg Gly His Gly His Arg Asn 230 235

Gly Thr Gly His Gly Asn Ser Thr His His Gly Pro Glu Tyr Met Arg 245 250 255 Cys Ser Pro His Leu Val Leu Ser Ala Leu Thr Ser Asp Asn His Gly 260 265 Ala Thr Tyr Ala Phe Ser Gly Thr His Tyr Trp Arg Leu Asp Thr Ser 280 Arg Asp Gly Trp His Ser Trp Pro Ile Ala His Gln Trp Pro Gln Gly 295 Pro Ser Ala Val Asp Ala Ala Phe Ser Trp Glu Glu Lys Leu Tyr Leu 305 310 Val Gln Gly Thr Gln Val Tyr Val Phe Leu Thr Lys Gly Gly Tyr Thr 325 330 Leu Val Ser Gly Tyr Pro Lys Arg Leu Glu Lys Glu Val Gly Thr Pro 340 345 His Gly Ile Ile Leu Asp Ser Val Asp Ala Ala Phe Ile Cys Pro Gly 360 Ser Ser Arg Leu His Ile Met Ala Gly Arg Arg Leu Trp Trp Leu Asp 375 380 Leu Lys Ser Gly Ala Gln Ala Thr Trp Thr Glu Leu Pro Trp Pro His 390 395 Glu Lys Val Asp Gly Ala Leu Cys Met Glu Lys Ser Leu Gly Pro Asn 405 410 Ser Cys Ser Ala Asn Gly Pro Gly Leu Tyr Leu Ile His Gly Pro Asn 420 425 Leu Tyr Cys Tyr Ser Asp Val Glu Lys Leu Asn Ala Ala Lys Ala Leu 435 440 Pro Gln Pro Gln Asn Val Thr Ser Leu Leu Gly Cys Thr His * 450 455

<210> 1459 <211> 187 <212> PRT

<213> Homo sapiens

<400> 1459 Gln Pro Ile

Met Gln Pro Ile Val Ala Lys Ala Leu Val Val Leu Leu Glu Val His 10 Pro Leu Gln Asp Gln Ala Glu Ser Gly Arg Leu Gly His Val His Leu 20 25 Leu Cys Ala Pro Ala Ala Leu Gln His Ala Leu Arg Gly Ile Thr Leu 40 45 His Asn Gly His His Gln Ala Asp His Leu Pro Asp Leu Met His His 55 60 Glu Ala Leu Ala Leu His Pro Asp His Arg Lys Leu Gln Ala Leu Pro His Lys Gly Phe Leu Ala Val His Leu Gln Asp Val Ala Ala Gly Thr 85 90 Gly Ile Leu Arg Pro Leu Leu Arg Gly Glu Ile Val Glu Val Val Arg 100 105 Ala Leu Val Ala Gly Gln Glu Pro Val Asp Leu Leu Gln Arg Leu Gly 120 125 Ala Gln Ala Val Gly Leu Ile Leu Asn Val Pro Val Leu Val Arg Lys 135 140 Gly Lys Arg Gly Gln Gln Val Ala Ile Gly Pro Gly Ile Thr Ser Val 155 Leu Gly Val Lys Pro Ala Arg Asp Pro Leu Gln Ser Gln Asn Pro Asn

165 170 175
Val Arg Gly Lys Val Ala Val Asp Leu Phe *
180 185 186

<210> 1460 <211> 223 <212> PRT <213> Homo sapiens

<400> 1460

Met Lys Phe Ala Leu Phe Thr Ser Gly Val Ala Leu Thr Leu Ser Phe 10 Val Phe Met Tyr Ala Lys Cys Glu Asn Glu Pro Phe Ala Gly Val Ser 25 Glu Ser Tyr Asn Gly Thr Gly Glu Leu Gly Asn Leu Ile Ala Pro Cys 40 Asn Ala Asn Cys Asn Cys Ser Arg Ser Tyr Tyr Tyr Pro Val Cys Gly 55 60 Asp Gly Val Gln Tyr Phe Ser Pro Cys Phe Ala Gly Cys Ser Asn Pro 70 75 Val Ala His Arg Lys Pro Lys Val Tyr Tyr Asn Cys Ser Cys Ile Glu 85 90 Arg Lys Thr Glu Ile Thr Ser Thr Ala Glu Thr Phe Gly Phe Glu Ala 100 105 Asn Ala Gly Lys Cys Glu Thr His Cys Ala Lys Leu Ala Ile Phe Leu 120 125 Cys Ile Val Phe Ile Gly Asn Ile Phe Thr Phe Met Ala Arg Ser Pro 135 Ile Thr Gly Ala Ile Pro Arg Gly Gly Asn His Arg Gln Arg Pro Pro 150 155 Thr Leu Gly Ile Gln Phe Met Ala Leu Arg Thr Leu Trp Thr Thr Pro 165 170 175 Trp Pro Ser Lys Thr Gly Cys Pro Ile His Gln Pro Gly Ser Leu Trp 180 185 Glu Lys Leu Gly Trp Arg Pro Leu Lys Thr Leu Arg Arg Pro Lys Pro 195 200 Ser Trp Asn Ala Leu Leu Ala Leu Ala His Pro Arg Ser Phe Gln 210 215 220 223

<210> 1461 <211> 210 <212> PRT <213> Homo sapiens

<400> 1461

Arg Val Val Pro Leu Asn Pro Ala Thr Lys Leu Ser Pro Leu Glu Ser 70 75 Gln Met Ala Leu His Thr Lys Ala Val Glu Ala Gly Met Val Phe Gly 85 90 His Arg Ala Glu His Lys Asp Pro Arg Ser Val Trp Glu Ser Tyr Trp 105 Leu Leu Gly Ser Pro Trp Ala Glu Val Thr Arg Leu His Pro Arg Arg 120 Ala Gln Leu Gly Ser Leu Pro Pro Pro Asp Pro Arg Thr Thr His Arg 135 140 Arg Gly Ala Val Ser Ile Phe Leu Lys Gly Pro Phe Gly Asp Leu Val 150 155 Leu Ser Val Glu Arg Thr Asp Val Ala Leu Ser Ser Gln His Ile Pro 170 Gly Ser Gly Arg Pro Gln Leu Lys Gln Cys Gln Gly Pro Gln Gly Ser 180 185 His Leu Asp Arg Pro Thr Ala Cys Asn Ser Ala Leu Leu Arg Arg Gln 200 205 His * 209

<210> 1462

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1462

<210> 1463

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1463

<210> 1464 <211> 200 <212> PRT <213> Homo sapiens

<400> 1464 Met Val Trp Arg Arg Leu Leu Arg Lys Arg Trp Val Leu Ala Leu Val 10 Phe Gly Leu Ser Leu Val Tyr Phe Leu Ser Ser Thr Phe Lys Gln Glu 25 Glu Arg Ala Val Arg Asp Arg Asn Leu Leu Gln Val His Asp His Asn 35 40 Gln Pro Ile Pro Trp Lys Val Gln Phe Asn Leu Gly Asn Ser Ser Arg 55 60 Pro Ser Asn Gln Cys Arg Asn Ser Ile Gln Gly Lys His Leu Ile Thr 70 75 Asp Glu Leu Gly Tyr Val Cys Glu Arg Lys Asp Leu Leu Val Asn Gly 85 90 Cys Cys Asn Val Asn Val Pro Ser Thr Lys Gln Tyr Cys Cys Asp Gly 100 105 Cys Trp Pro Asn Gly Cys Cys Ser Ala Tyr Glu Tyr Cys Val Ser Cys 120 125 Cys Leu Gln Pro Asn Lys Gln Leu Leu Glu Arg Phe Leu Asn Arg 130 135 140 Ala Ala Val Ala Phe Gln Asn Leu Phe Met Ala Val Glu Asp His Phe 145 150 155 Glu Leu Cys Leu Ala Lys Cys Arg Thr Ser Ser Gln Ser Val Gln His 165 170 175 Glu Asn Thr Tyr Arg Asp Pro Ile Ala Lys Tyr Cys Tyr Gly Glu Ser 180 185 Pro Pro Glu Leu Phe Pro Ala * 195

<210> 1465 <211> 46 <212> PRT <213> Homo sapiens

<210> 1466 <211> 56 <212> PRT <213> Homo sapiens

<210> 1467 <211> 366 <212> PRT <213> Homo sapiens

<400> 1467 Met Arg Gly Gln Val Val Thr Leu Ile Leu Leu Leu Leu Lys Val 10 Tyr Gln Gly Lys Gly Cys Gln Gly Ser Ala Asp His Val Val Ser Ile 25 Ser Gly Val Pro Leu Gln Leu Gln Pro Asn Ser Ile Gln Thr Lys Val Asp Ser Ile Ala Trp Lys Lys Leu Leu Pro Ser Gln Asn Gly Phe His 55 His Ile Leu Lys Trp Glu Asn Gly Ser Leu Pro Ser Asn Thr Ser Asn 70 75 Asp Arg Phe Ser Phe Ile Val Lys Asn Leu Ser Leu Leu Ile Lys Ala 85 90 Ala Gln Gln Asp Ser Gly Leu Tyr Cys Leu Glu Val Thr Ser Ile 100 105 110 Ser Gly Lys Val Gln Thr Ala Thr Phe Gln Val Phe Val Phe Asp Lys 115 120 Val Glu Lys Pro Arg Leu Gln Gly Gln Gly Lys Ile Leu Asp Arg Gly 130 135 140 Arg Cys Gln Val Ala Leu Ser Cys Leu Val Ser Arg Asp Gly Asn Val 150 155 Ser Tyr Ala Trp Tyr Arg Gly Ser Lys Leu Ile Gln Thr Ala Gly Asn 170 Leu Thr Tyr Leu Asp Glu Glu Val Asp Ile Asn Gly Thr His Thr Tyr 180 185 Thr Cys Asn Val Ser Asn Pro Val Ser Trp Glu Ser His Thr Leu Asn 200 205 Leu Thr Gln Asp Cys Gln Asn Ala His Gln Glu Phe Arg Phe Trp Pro 215 220 Phe Leu Val Ile Ile Val Ile Leu Ser Ala Leu Phe Leu Gly Thr Leu 230 235 Ala Cys Phe Cys Val Trp Arg Arg Lys Arg Lys Glu Lys Gln Ser Glu 250 Thr Ser Pro Lys Glu Phe Leu Thr Ile Tyr Glu Asp Val Lys Asp Leu 260 265 Lys Thr Arg Arg Asn His Glu Gln Glu Gln Thr Phe Pro Gly Gly Gly 275 280 285 Ser Thr Ile Tyr Ser Met Ile Gln Ser Gln Ser Ser Ala Pro Thr Ser 295 300 Gln Glu Pro Ala Tyr Thr Leu Tyr Ser Leu Ile Gln Pro Ser Arg Lys

<210> 1468 <211> 57 <212> PRT <213> Homo sapiens

<210> 1469 <211> 110 <212> PRT <213> Homo sapiens

105

<210> 1470 <211> 59 <212> PRT <213> Homo sapiens

<400> 1470

<210> 1471 <211> 123 <212> PRT <213> Homo sapiens

<400> 1471

Met Met His Phe Leu Thr Gly Gly Trp Lys Val Leu Phe Ala Cys Val 10 Pro Pro Thr Glu Tyr Cys His Gly Trp Ala Cys Phe Gly Val Ser Ile 25 Leu Val Ile Gly Leu Leu Thr Ala Leu Ile Gly Asp Leu Ala Ser His Phe Gly Cys Thr Val Gly Leu Lys Asp Ser Val Asn Ala Val Val Phe 55 Val Ala Leu Gly Thr Ser Ile Pro Gly Asn Thr Leu Gly Asp Phe Gly 70 75 Gly Val Gly Ser Gln Met Ser Gln Ala Gly Ala Thr Gln Asp Pro Ala 85 90 Glu Met Arg His Val Arg Gln Gln Gly Gly Gly Ala Ala Gly Pro Val 105 Arg Arg Arg Val His Arg Glu Arg Asp Pro Leu 115 120

<210> 1472 <211> 316 <212> PRT <213> Homo sapiens

<400> 1472

Met Val Ser Ala Ser Gly Thr Ser Phe Phe Lys Gly Met Leu Leu Gly 10 Ser Ile Ser Trp Val Leu Ile Thr Met Phe Gly Gln Ile His Ile Arg 20 25 His Arg Gly Gln Thr Gln Asp His Glu His His His Leu Arg Pro Pro 40 Asn Arg Asn Asp Phe Leu Asn Thr Ser Lys Val Ile Leu Leu Glu Leu **50** . 55 Ser Lys Ser Ile Arg Val Phe Cys Ile Ile Phe Gly Glu Ser Glu Asp 70 Glu Ser Tyr Trp Ala Val Leu Lys Glu Thr Trp Thr Lys His Cys Asp 90 Lys Ala Glu Leu Tyr Asp Thr Lys Asn Asp Asn Leu Phe Asn Ile Glu 105 Ser Asn Asp Arg Trp Val Gln Met Arg Thr Ala Tyr Lys Tyr Val Phe

120 Glu Lys Asn Gly Asp Asn Tyr Asn Trp Phe Phe Leu Ala Leu Pro Thr 130 135 140 Thr Phe Ala Val Ile Glu Asn Leu Lys Tyr Leu Leu Phe Thr Arg Asp 155 Ala Ser Gln Pro Phe Tyr Leu Gly His Thr Val Ile Phe Gly Asp Leu 165 170 175 Glu Tyr Val Thr Val Glu Gly Gly Ile Val Leu Ser Arg Glu Leu Met 180 185 190 Lys Arg Leu Asn Arg Leu Leu Asp Asn Ser Glu Thr Cys Ala Asp Gln 195 200 205 Ser Val Ile Trp Lys Leu Ser Glu Asp Lys Gln Leu Ala Ile Cys Leu 215 220 Lys Tyr Ala Gly Val His Ala Glu Asn Ala Glu Asp Tyr Glu Gly Arg 230 235 Asp Val Phe Asn Thr Lys Pro Ile Ala Gln Leu Ile Glu Glu Ala Leu 245 250 255 Ser Asn Asn Pro Gln Gln Val Val Glu Gly Cys Cys Ser Asp Met Ala 265 270 Ile Thr Phe Asn Gly Leu Thr Pro Gln Lys Met Glu Val Met Met Tyr 285 280 Gly Leu Tyr Arg Leu Arg Ala Phe Gly His Tyr Phe Asn Asp Thr Leu 300 295 Val Phe Leu Pro Pro Val Gly Ser Glu Asn Asp * 305 310

<210> 1473 <211> 65

<212> PRT

<213> Homo sapiens

<400> 1473

 Met Gln Cys
 Pro Pro Pro Pro Phe Leu Gly Gln Trp Leu Leu Cys
 Pro Ala

 1
 5
 10
 10
 15

 Ala Arg Gln Trp Gly Pro Gly Ala Gly Ser Pro Gly Pro Val Leu Val
 20
 25
 30

 Pro Ala Gly Arg Arg Arg Pro Pro Pro Pro Arg Ser Gly Pro Gln Arg Asp
 45

 Ser Pro Ala Pro Val Arg Gly Pro Gln Phe His Ser Val Val Gly Pro
 64

<210> 1474

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1474

Met Ile Phe Met Arg Val Leu Met Leu Cys Cys Met Asp Ser Leu 1 5 5 6 10 10 5 15 Gly Ser Leu Asp Thr Phe Gln Trp Leu Ser Arg Val Leu Cys Pro Thr 20 5 30

Glu Asn Leu Ile Phe Glu Leu Asn Gly Tyr Glu Leu Asn Ser Thr Trp
35 40 45

Phe Gly Trp Leu Asn Thr *
50 54

<210> 1475

<211> 128

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ...(128)

<223> Xaa = any amino acid or nothing

<400> 1475

Met Lys Phe Gln Leu Phe Leu Ser Tyr Val Phe Ile Thr Gln Val Phe 1 5 Ser Arg Pro Phe Gln Ser Asn Leu Gly Ser Leu Thr Pro Ala Ser Ser 20 25 Gln Ile Pro Leu Gln Leu Pro Lys Ala Leu Cys Val Arg Cys Leu Asn 40 Thr Val Xaa Xaa Xaa Xaa Thr Gly Phe Gly Lys Phe Gln Ile Thr 55 Ile Gln Ser Pro Gly Gly Pro Leu Val Leu Ala Arg Pro Trp Ala Ser Lys Phe Pro Ser Pro Lys Phe Xaa Xaa Xaa Xaa Xaa Pro Lys Met 90 Gly Gly Lys Thr Phe Ala Tyr Gly Arg Ile Asn Pro Thr Arg Pro Ala 100 105 110 Lys Asn Xaa Xaa Xaa Xaa Xaa Ser Leu Ala Ser Leu Asn Pro Thr 120 125 128

<210> 1476 <211> 210 <212> PRT <213> Homo sapiens

<400> 1476

Met Tyr Phe Phe Leu Leu Leu Phe Phe Asn Val Gln Arg Leu Ala 5 10 Phe Pro Phe Gly Ile Pro Asn Asp Pro Met Leu Trp Ser Glu Gly Gln 20 25 Ser His Leu Cys Trp Arg Ser Pro Leu Ile Pro Ser Ala Gln Phe Arg 40 Gly Ser Arg Ala Asp Ile Arg Gly Ser Met Leu His Ser Ser Ser Gly 55 60 Arg Val Val Pro Leu Asn Pro Ala Thr Lys Leu Ser Pro Leu Glu Ser 75 Gln Met Ala Leu His Thr Lys Ala Val Glu Ala Gly Met Val Phe Gly 85 90 His Arg Ala Glu His Lys Asp Pro Arg Ser Val Trp Glu Ser Tyr Trp

<210> 1477 <211> 57 <212> PRT <213> Homo sapiens

<210> 1478 <211> 97 <212> PRT <213> Homo sapiens

 A400> 1478

 Met Arg Ile Trp Ser Arg Ala Val Gly Asp Gly Pro Ala Ala Val Cys 1

 Cys Pro Leu Arg Ser Trp Cys Leu Leu Leu Trp Ala Leu Asp Ser Leu 20

 Asp Pro Ala Ala Val Thr Thr His Ala Ser Ala Met Leu Ser Gly Val 35

 Phe Thr Pro Pro Pro Phe Val Ser Ala Leu Pro Val Gln Trp Met Gln Met 50

 Pro Val Leu Ser Phe Leu Ser Leu Thr Gly Ser Ser Val Tyr Val His 65

 Met Ala Leu Leu Ser Gly His Gln Gly Ser Asp Thr Cys Ser Gly Leu 85

<210> 1479 <211> 113 <212> PRT <213> Homo sapiens

<400> 1479 Met Leu Ser Ile Ser Tyr Phe Ser Asn Ser Leu Met Leu Arg Leu Val 1 5 10 Pro Leu Ala Ala Tyr Val Leu Ser Tyr Leu Ile Cys Ser Val Leu Leu 25 20 His Ile Asn Gln Thr Thr Val Thr Thr Tyr Arg Gly Arg Lys Gln Arg 40 45 Lys Lys Ile Gln Phe Ala Thr Gly Asn His Gln Ser Ala Gln Ser Tyr 50 55 Ser Glu Leu Leu Ser Leu Ser Leu Ser Phe Ser Ser Leu Leu Ser Pro 70 75 80 Val Phe Ser Leu Pro Ser Trp Ser Leu Pro Ser Leu Pro Pro Phe Phe 90 Ser His Ser Pro His Gln Lys Gly Ile Met Met Val Pro Arg Ser Val

<210> 1480 <211> 91 <212> PRT <213> Homo sapiens

<210> 1481 <211> 54 <212> PRT <213> Homo sapiens

20 25 30

Phe Leu Ser Leu Arg Leu Glu Thr Leu Thr Phe Phe Val Leu Trp Leu
35 40 45

Val Pro Tyr Leu Ile *
50 53

<210> 1482 <211> 56 <212> PRT <213> Homo sapiens

<210> 1483 <211> 202 <212> PRT <213> Homo sapiens

<400> 1483 Met Leu Leu Leu Gly Leu Cys Leu Gly Leu Ser Leu Cys Val Gly 10 Ser Gln Glu Glu Ala Gln Ser Trp Gly His Ser Ser Glu Gln Asp Gly 25 Leu Arg Val Pro Arg Gln Val Arg Leu Leu Gln Arg Leu Lys Thr Lys Pro Leu Met Thr Glu Phe Ser Val Lys Ser Thr Ile Ile Ser Arg Tyr 50 55 Ala Phe Thr Thr Val Ser Cys Arg Met Leu Asn Arg Ala Ser Glu Asp 75 80 70 Gln Asp Ile Glu Phe Gln Met Gln Ile Pro Ala Ala Ala Phe Ile Thr 90 95 Asn Phe Thr Met Leu Ile Gly Asp Lys Val Tyr Gln Gly Glu Ile Thr 105 Glu Arg Glu Lys Lys Ser Gly Asp Arg Val Lys Glu Lys Arg Asn Lys 120 125 Thr Thr Glu Glu Asn Gly Glu Lys Gly Thr Glu Ile Phe Arg Ala Ser 135 Ala Val Ile Pro Ser Lys Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu 145 150 155 160 Glu Leu Leu Gln Arg Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val 170 Arg Pro Gln Gln Leu Ser Gly Arg Leu Ser Val Asp Val Asn Ile Leu 185 Glu Ser Ala Gly Ile Ala Ser Leu Glu Val

<210> 1484 <211> 477 <212> PRT <213> Homo sapiens

<400> 1484 Met Pro Gln Leu Ser Leu Ser Trp Leu Gly Leu Gly Gln Val Ala Ala 1 5 10 Phe Pro Trp Leu Leu Leu Leu Ala Gly Ala Ser Arg Leu Leu Ala 20 Gly Phe Leu Ala Trp Thr Tyr Ala Phe Tyr Asp Asn Cys Arg Arg Leu 35 40 Gln Tyr Phe Pro Gln Pro Pro Lys Gln Lys Trp Phe Trp Gly Gln Pro 55 Gly Pro Pro Ala Ile Ala Pro Lys Asp Asp Leu Ser Ile Arg Phe Leu 70 75 Lys Pro Trp Leu Gly Glu Gly Ile Leu Leu Ser Gly Gly Asp Lys Trp Ser Arg His Arg Arg Met Leu Thr Pro Ala Phe His Phe Asn Ile Leu 100 105 Lys Ser Tyr Ile Thr Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp 115 120 Lys Trp Gln His Leu Ala Ser Glu Gly Ser Ser Cys Leu Asp Met Phe 130 . 135 140 Glu His Ile Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe 150 155 Ser Phe Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr 170 Ile Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu 180 185 Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arq Arq Phe 195 200 His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val Ile Arg 215 220 Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp Phe Phe Lys 230 235 Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp Val Leu Leu Leu 250 Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp Glu Asp Ile Arg Ala 260 265 Glu Ala Asp Thr Phe Met Phe Gly Gly His Asp Thr Thr Ala Ser Gly 275 280 Leu Ser Trp Val Leu Tyr Asn Leu Ala Arg His Pro Glu Tyr Gln Glu 295 300 Arg Cys Arg Gln Glu Val Gln Glu Leu Leu Lys Asp Arg Asp Pro Lys 310 315 Glu Ile Glu Trp Asp Asp Leu Ala Gln Leu Pro Phe Leu Thr Met Cys 330 Val Lys Glu Ser Leu Arg Leu His Pro Pro Ala Pro Phe Ile Ser Arg 345 Cys Cys Thr Gln Asp Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys 360 Gly Ile Thr Cys Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr 375 380 Val Trp Pro Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu

<210> 1485 <211> 67 <212> PRT <213> Homo sapiens

<210> 1486 <211> 93 <212> PRT <213> Homo sapiens

65 66

<210> 1487 <211> 88 <212> PRT

<213> Homo sapiens

<210> 1488 <211> 268 <212> PRT <213> Homo sapiens

<400> 1488

Met Gly Ser Ala Cys Ile Lys Val Thr Lys Tyr Phe Leu Phe Leu Phe 10 Asn Leu Ile Phe Phe Ile Leu Gly Ala Val Ile Leu Gly Phe Gly Val 20 25 Trp Ile Leu Ala Asp Lys Ser Ser Phe Ile Ser Val Leu Gln Thr Ser 40 Ser Ser Ser Leu Arg Met Gly Ala Tyr Val Phe Ile Gly Val Gly Ala 55 Val Thr Met Leu Met Gly Phe Leu Gly Cys Ile Gly Ala Val Asn Glu 75 70 Val Arg Cys Leu Leu Gly Leu Tyr Phe Ala Phe Leu Leu Leu Ile Leu 90 85 Ile Ala Gln Val Thr Ala Gly Ala Leu Phe Tyr Phe Asn Met Gly Lys 105 Leu Lys Gln Glu Met Gly Gly Ile Val Thr Glu Leu Ile Arg Asp Tyr 120 125 Asn Ser Ser Arg Glu Asp Ser Leu Gln Asp Ala Trp Asp Tyr Val Gln 135 140 Ala Gln Val Lys Cys Cys Gly Trp Val Ser Phe Tyr Asn Trp Thr Asp 150 155 Asn Ala Glu Leu Met Asn Arg Pro Glu Val Thr Tyr Pro Cys Ser Cys 165 170 Glu Val Lys Gly Glu Glu Asp Asn Ser Leu Ser Val Arg Lys Gly Phe 185 Cys Glu Ala Pro Gly Asn Arg Thr Gln Ser Gly Asn His Pro Glu Asp 200 Trp Pro Val Tyr Gln Glu Gly Cys Met Glu Lys Val Gln Ala Trp Leu 215 220 Gln Glu Asn Leu Gly Ile Ile Leu Gly Val Gly Val Gly Val Ala Ile 230 235 Ile Glu Leu Leu Gly Met Val Leu Ser Ile Cys Leu Cys Arg His Val 245 250

His Ser Glu Asp Tyr Ser Lys Val Pro Lys Tyr *

260 265 267

<210> 1489 <211> 832 <212> PRT <213> Homo sapiens

<400> 1489

Met Thr Leu Ala Leu Ala Tyr Leu Leu Ala Leu Pro Gln Val Leu Asp 5 10 Ala Asn Arg Cys Phe Glu Lys Gln Ser Pro Ser Ala Leu Ser Leu Gln 20 . 25 Leu Ala Ala Tyr Tyr Ser Leu Gln Ile Tyr Ala Arg Leu Ala Pro 40 Cys Phe Arg Asp Lys Cys His Pro Leu Tyr Arg Ala Asp Pro Lys Glu 55 60 Leu Ile Lys Met Val Thr Arg His Val Thr Arg His Glu His Glu Ala 70 75 Trp Pro Glu Asp Leu Ile Ser Leu Thr Lys Gln Leu His Cys Tyr Asn 85 90 Glu Arg Leu Leu Asp Phe Thr Gln Ala Gln Ile Leu Gln Gly Leu Arg 100 105 Lys Gly Val Asp Val Gln Arg Phe Thr Ala Asp Asp Gln Tyr Lys Arg 115 120 125 Glu Thr Ile Leu Gly Leu Ala Glu Thr Leu Glu Glu Ser Val Tyr Ser 135 140 Ile Ala Ile Ser Leu Ala Gln Arg Tyr Ser Val Ser Arg Trp Glu Val . 150 155 Phe Met Thr His Leu Glu Phe Leu Phe Thr Asp Ser Gly Leu Ser Thr 165 170 Leu Glu Ile Glu Asn Arg Ala Gln Asp Leu His Leu Phe Glu Thr Leu 180 185 Lys Thr Asp Pro Glu Ala Phe His Gln His Met Val Lys Tyr Ile Tyr 195 200 Pro Thr Ile Gly Gly Phe Asp His Glu Arg Leu Gln Tyr Tyr Phe Thr 215 Leu Leu Glu Asn Cys Gly Cys Ala Asp Leu Gly Asn Cys Ala Ile Lys 225 230 235 Pro Glu Thr His Ile Arg Leu Leu Lys Lys Phe Lys Val Val Ala Ser 245 250 255 Gly Leu Asn Tyr Lys Lys Leu Thr Asp Glu Asn Met Ser Pro Leu Glu 265 270 Ala Leu Glu Pro Val Leu Ser Ser Gln Asn Ile Leu Ser Ile Ser Lys 280 Leu Val Pro Lys Ile Pro Glu Lys Asp Gly Gln Met Leu Ser Pro Ser Ser Leu Tyr Thr Ile Trp Leu Gln Lys Leu Phe Trp Thr Gly Asp Pro 310 His Leu Ile Lys Gln Val Pro Gly Ser Ser Pro Glu Trp Leu His Ala 330 Tyr Asp Val Cys Met Lys Tyr Phe Asp Arg Leu His Pro Gly Asp Leu 345 Ile Thr Val Val Asp Ala Val Thr Phe Ser Pro Lys Ala Val Thr Lys 360 Leu Ser Val Glu Ala Arg Lys Glu Met Thr Arg Lys Ala Ile Lys Thr 375 380

```
Val Lys His Phe Ile Glu Lys Pro Arg Lys Arg Asn Ser Glu Asp Glu
                 390
                                   395
Ala Gln Glu Ala Lys Asp Ser Lys Val Thr Tyr Ala Asp Thr Leu Asn
             405
                    410
His Leu Glu Lys Ser Leu Ala His Leu Glu Thr Leu Ser His Ser Phe
          420
                           425
Ile Leu Ser Leu Lys Asn Ser Glu Gln Glu Thr Leu Gln Lys Tyr Ser
                       440
His Leu Tyr Asp Leu Ser Arg Ser Glu Lys Glu Lys Leu His Asp Glu
                    455
                                     460
Ala Val Ala Ile Cys Leu Asp Gly Gln Pro Leu Ala Met Ile Gln Gln
                      475
Leu Leu Glu Val Ala Val Gly Pro Leu Asp Ile Ser Pro Lys Asp Ile
                               490
Val Gln Ser Ala Ile Met Lys Ile Ile Ser Ala Leu Ser Gly Gly Ser
         500
                          505
Ala Asp Leu Gly Gly Pro Arg Asp Pro Leu Lys Val Leu Glu Gly Val
                      520
Val Ala Ala Val His Ala Ser Val Asp Lys Gly Glu Glu Leu Val Ser
                    535 540
Pro Glu Asp Leu Leu Glu Trp Leu Arg Pro Phe Cys Ala Asp Asp Ala
          550
                       555
Trp Pro Val Arg Pro Arg Ile His Val Leu Gln Ile Leu Gly Gln Ser
                              570
Phe His Leu Thr Glu Glu Asp Ser Lys Leu Leu Val Phe Phe Arg Thr
          580
                           585
Glu Ala Ile Leu Lys Ala Ser Trp Pro Gln Arg Gln Val Asp Ile Ala
     595 600
Asp Ile Glu Asn Glu Glu Asn Arg Tyr Cys Leu Phe Met Glu Leu Leu
                    615
                                   620
Glu Ser Ser His His Glu Ala Glu Phe Gln His Leu Val Leu Leu Leu
                630 635
Gln Ala Trp Pro Pro Met Lys Ser Glu Tyr Val Ile Thr Asn Asn Pro
            645
                              650
Trp Val Arg Leu Ala Thr Val Met Leu Thr Arg Cys Thr Met Glu Asn
         660 665 670
Lys Glu Gly Leu Gly Asn Glu Val Leu Lys Met Cys Arg Ser Leu Tyr
     675 680 685
Asn Thr Lys Gln Met Leu Pro Ala Glu Gly Val Lys Glu Leu Cys Leu
                   695
                                     700
Leu Leu Leu Asn Gln Ser Leu Leu Leu Pro Ser Leu Lys Leu Leu
                 710
                                  715
Glu Ser Arg Asp Glu His Leu His Glu Met Ala Leu Glu Gln Ile Thr
              725
                               730
Ala Val Thr Thr Val Asn Asp Ser Asn Cys Asp Gln Glu Leu Leu Ser
                           745
Leu Leu Leu Asp Ala Lys Leu Leu Val Lys Cys Val Ser Thr Pro Phe
                       760
Tyr Pro Arg Ile Val Asp His Leu Leu Ala Ser Leu Gln Gln Gly Arg
                    775
                                      780
Trp Asp Ala Glu Glu Leu Gly Arg His Leu Arg Glu Ala Gly His Glu
                790
                                  795
Ala Glu Ala Gly Ser Leu Leu Leu Ala Val Arg Gly Thr His Gln Ala
            805 810
Phe Arg Thr Phe Ser Thr Ala Leu Arg Ala Ala Gln His Trp Val *
                          825
                                   830 831
```

<210> 1490 <211> 55 <212> PRT <213> Homo sapiens

<210> 1491 <211> 134 <212> PRT <213> Homo sapiens

50

<400> 1491 Met Thr Thr Phe Pro Pro Arg Lys Met Val Ala Gln Phe Leu Leu 5 ' 10 Val Ala Gly Asn Val Ala Asn Ile Thr Thr Val Ser Leu Trp Glu Glu 25 Phe Ser Ser Ser Asp Leu Ala Asp Leu Arg Phe Leu Asp Met Ser Gln 40 Asn Gln Phe Gln Tyr Leu Pro Asp Gly Phe Leu Arg Lys Met Pro Ser 55 Leu Ser His Leu Asn Leu His Gln Asn Cys Leu Met Thr Leu His Ile 65 , 70 , Arg Glu His Glu Pro Pro Gly Ala Leu Thr Glu Leu Asp Leu Ser His 85 90 Asn Gln Leu Ser Glu Leu His Leu Ala Pro Gly Leu Ala Ser Cys Leu 100 105 110 Gly Ser Leu Arg Leu Phe Asn Leu Ser Ser Asn Gln Leu Leu Gly Val Pro Pro Gly Pro Leu Tyr

<210> 1492 <211> 71 <212> PRT <213> Homo sapiens

130 134

Cys Glu Ser Ile Lys Pro Leu Phe Leu Ile Asn Tyr Pro Val Ser Asn 50 55 60
Lys Ser Leu Leu Ala Thr *
65 70

<210> 1493 <211> 78 <212> PRT <213> Homo sapiens

<210> 1494 <211> 121 <212> PRT <213> Homo sapiens

<400> 1494 Met Ala Gly Leu Asn Cys Gly Val Ser Ile Ala Leu Leu Gly Val Leu 10 Leu Leu Gly Ala Ala Arg Leu Pro Arg Gly Ala Glu Ala Phe Glu Ile 25 Ala Leu Pro Arg Glu Ser Asn Ile Thr Val Leu Ile Lys Leu Gly Thr Pro Thr Leu Leu Ala Lys Pro Cys Tyr Ile Val Ile Ser Lys Arg His 50 55 60 Ile Thr Met Leu Ser Ile Lys Ser Gly Glu Arg Ile Val Phe Thr Phe 65 70 75 Ser Cys Gln Ser Pro Glu Asn His Phe Val Ile Glu Ile Gln Lys Asn 85 90 9**5** Ile Asp Cys Met Ser Gly Pro Cys Pro Phe Gly Glu Val Gln Leu Gln 105 Pro Ser Thr Ser Leu Leu Pro Thr Leu

120 121

<210> 1495 <211> 91 <212> PRT <213> Homo sapiens

115

<210> 1496 <211> 72 <212> PRT <213> Homo sapiens

<210> 1497 <211> 196 <212> PRT <213> Homo sapiens

<400> 1497 Met Ala Pro Arg Ala Leu Pro Gly Ser Ala Val Leu Ala Ala Ala Val 10 1 5 Phe Val Gly Gly Ala Val Ser Ser Pro Leu Val Ala Pro Asp Asn Gly 25 Ser Ser Arg Thr Leu His Ser Arg Thr Glu Thr Thr Pro Ser Pro Ser 35 40 Asn Asp Thr Gly Asn Gly His Pro Glu Tyr Ile Ala Tyr Ala Leu Val 55 Pro Val Phe Phe Ile Met Gly Leu Phe Gly Val Leu Ile Cys His Leu 70 75 80 Leu Lys Lys Lys Gly Tyr Arg Cys Thr Thr Glu Ala Glu Gln Asp Ile 90 Glu Glu Glu Lys Val Glu Lys Ile Glu Leu Asn Asp Ser Val Asn Glu 105 Asn Ser Asp Thr Val Gly Gln Ile Val His Tyr Ile Met Lys Asn Glu 120

<210> 1498 <211> 75 <212> PRT <213> Homo sapiens

<210> 1499 <211> 62 <212> PRT <213> Homo sapiens

<210> 1500 <211> 138 <212> PRT

<213> Homo sapiens

 $^{<\!400>}$ 1500 $^{\cdot}$ Met Pro Ile Trp Lys Pro Phe Met Ala Trp Met Ala Ala Trp Ala Leu

10 Ala Val Leu Ser Lys Leu Thr Lys Pro Ile His Leu Leu Trp Met Val 20 25 Ala Arg Ser Ile Asn Thr Leu Glu Glu Met Ile Leu Pro Lys Gly Thr 40 Asn Ile Cys Val Ser Ser Val Ser Pro Asn Ser Phe Ser Leu Leu 55 Leu Gln Glu Gly Arg Arg Leu Glu Asp Ala Val Arg Asp Gly Arg Asp 70 Gly Arg Gly Gly Ala His Gly Cys Val Leu Leu Asp Ser Gly Glu Gly 85 90 Arg Met Gln Cys Leu Gly His Ser Arg Ala Leu Ser Trp Val Trp His 100 105 Lys Ala Ile Gly Ile Asp Glu Phe Pro Gly Gln Gly Ala His Leu Glu 120 Arg Ala Arg His Leu Pro Ser His Trp 130 135 137

<210> 1501 <211> 82 <212> PRT

<213> Homo sapiens

<400> 1501

<210> 1502 <211> 54 <212> PRT <213> Homo sapiens

<400> 1502 Leu Leu Phe

<210> 1503 <211> 62 <212> PRT <213> Homo sapiens

<210> 1504 <211> 46 <212> PRT <213> Homo sapiens

<210> 1505 <211> 48 <212> PRT <213> Homo sapiens

<210> 1506 <211> 190 <212> PRT <213> Homo sapiens

<400> 1506
Met Trp Leu Leu Gly Pro Leu Cys Leu Leu Leu Ser Ser Ala Ala Glu

5 10 Ser Gln Leu Leu Pro Gly Asn Asn Phe Thr Asn Glu Cys Asn Ile Pro 20 25 Gly Asn Phe Val Cys Ser Asn Gly Arg Cys Ile Pro Gly Ala Trp Gln 40 Cys Asp Gly Leu Pro Asp Cys Phe Asp Lys Ser Asp Glu Lys Glu Cys 55 60 Pro Lys Ala Lys Ser Lys Cys Gly Pro Thr Phe Phe Pro Cys Ala Ser 70 Gly Ile His Cys Ile Ile Gly Arg Phe Arg Cys Asn Gly Phe Glu Asp 90 Cys Pro Asp Gly Ser Asp Glu Glu Asn Cys Thr Ala Asn Pro Leu Leu 105 Cys Ser Thr Ala Arg Tyr His Cys Lys Asn Gly Leu Cys Ile Asp Lys 120 Ser Phe Ile Cys Asp Gly Gln Asn Asn Cys Gln Asp Asn Ser Asp Glu Glu Ser Cys Glu Ser Ser Gln Val Phe Arg Pro Gln Val Ser Glu Trp 150 Gln Ala Arg Pro Arg Asp Leu Cys Ala Arg Trp Asn Ile Pro Phe Leu 165 170 175 Gly Arg Leu Glu Arg Pro Trp Ser Phe Thr Ser Ser Gln Gln · 185

<210> 1507 <211> 60 <212> PRT

<213> Homo sapiens

<400> 1507

<210> 1508 <211> 48 <212> PRT <213> Homo sapiens

<210> 1509 <211> 85 <212> PRT <213> Homo sapiens

<400> 1509

 Met
 Thr
 Gly
 Ser
 Arg
 Cys
 Glu
 Glu
 His
 Val
 Phe
 Ser
 Gln
 Gln
 Pro

 Gly
 His
 Ile
 Ala
 Ser
 Ile
 Leu
 Ile
 Pro
 Leu
 Leu

<210> 1510 <211> 55 <212> PRT <213> Homo sapiens

<210> 1511 <211> 108 <212> PRT <213> Homo sapiens

<400> 1511

85 90 95 Gly Gln Arg Gly Pro Arg Glu Glu Met Arg Gly * 100 105 107

<210> 1512 <211> 119 <212> PRT <213> Homo sapiens

<400> 1512 Met Val Ala Arg Val Trp Ser Leu Met Arg Phe Leu Ile Lys Gly Ser 5 10 Val Ala Gly Gly Ala Val Tyr Leu Val Tyr Asp Gln Glu Leu Leu Gly 25 Pro Ser Asp Lys Ser Gln Ala Ala Leu Gln Lys Ala Gly Glu Val Val 40 Pro Pro Ala Met Tyr Gln Phe Ser Gln Tyr Val Cys Gln Gln Thr Gly 55 60 Leu Gln Ile Pro Gln Leu Pro Ala Pro Pro Lys Ile Tyr Phe Pro Ile 70 75 Arg Asp Ser Trp Asn Ala Gly Ile Met Thr Val Met Ser Ala Leu Ser 85 90 Val Ala Pro Ser Lys Ala Arg Glu Tyr Ser Lys Glu Gly Trp Glu Tyr 100 105 Val Lys Ala Arg Thr Lys * 115 118

<210> 1513 <211> 973 <212> PRT <213> Homo sapiens

<400> 1513 Met Val Lys Ser Lys Trp Gly Leu Ala Leu Ala Ala Val Val Thr Val Leu Ser Ser Leu Leu Met Ser Val Gly Leu Cys Thr Leu Phe Gly Leu 25 Thr Pro Thr Leu Asn Gly Gly Glu Ile Phe Pro Tyr Leu Val Val Val 40 Ile Gly Leu Glu Asn Val Leu Val Leu Thr Lys Ser Val Val Ser Thr 50 55 60 Pro Val Asp Leu Glu Val Lys Leu Arg Ile Ala Gln Gly Leu Ser Ser 70 75 Glu Ser Trp Ser Ile Met Lys Asn Met Ala Thr Glu Leu Gly Ile Ile 90 Leu Ile Gly Tyr Phe Thr Leu Val Pro Ala Ile Gln Glu Phe Cys Leu 100 105 110 Phe Ala Val Val Gly Leu Val Ser Asp Phe Phe Leu Gln Met Leu Phe 120 125 Phe Thr Thr Val Leu Ser Ile Asp Ile Arg Arg Met Glu Leu Ala Asp 130 135 140 Leu Asn Lys Arg Leu Pro Pro Glu Ala Cys Leu Pro Ser Ala Lys Pro 150

Val Gly Gln Pro Thr Arg Tyr Glu Arg Gln Leu Ala Val Arg Pro Ser 170 165 Thr Pro His Thr Ile Thr Leu Gln Pro Ser Ser Phe Arg Asn Leu Arg 180 185 Leu Pro Lys Arg Leu Arg Val Val Tyr Phe Leu Ala Arg Thr Arg Leu 200 Ala Gln Arg Leu Ile Met Ala Gly Thr Val Val Trp Ile Gly Ile Leu 215 220 Val Tyr Thr Asp Pro Ala Gly Leu Arg Asn Tyr Leu Ala Ala Gln Val 230 235 Thr Glu Gln Ser Pro Leu Gly Glu Gly Ala Leu Ala Pro Met Pro Val 250 Pro Ser Gly Met Leu Pro Pro Ser His Pro Asp Pro Ala Phe Ser Ile 265 Phe Pro Pro Asp Ala Pro Lys Leu Pro Glu Asn Gln Thr Ser Pro Gly 280 Glu Ser Pro Glu Arg Gly Gly Pro Ala Glu Val Val His Asp Ser Pro 295 Val Pro Glu Val Thr Trp Gly Pro Glu Asp Glu Glu Leu Trp Arg Lys 310 315 Leu Ser Phe Arg His Trp Pro Thr Leu Phe Ser Tyr Tyr Asn Ile Thr 325 330 Leu Ala Lys Arg Tyr Ile Ser Leu Leu Pro Val Ile Pro Val Thr Leu 345 340 Arg Leu Asn Pro Arg Glu Ala Leu Glu Gly Arg His Pro Gln Asp Gly 360 Arg Ser Ala Trp Pro Pro Pro Gly Pro Ile Pro Ala Gly His Trp Glu 375 380 Ala Gly Pro Lys Gly Pro Gly Gly Val Gln Ala His Gly Asp Val Thr 390 395 Leu Tyr Lys Val Ala Ala Leu Gly Leu Ala Thr Gly Ile Val Leu Val 405 410 Leu Leu Leu Cys Leu Tyr Arg Val Leu Cys Pro Arg Asn Tyr Gly 420 425 Gln Leu Gly Gly Pro Gly Arg Arg Arg Gly Glu Leu Pro Cys 440 Asp Asp Tyr Gly Tyr Ala Pro Pro Glu Thr Glu Ile Val Pro Leu Val 455 Leu Arg Gly His Leu Met Asp Ile Glu Cys Leu Ala Ser Asp Gly Met 470 475 Leu Leu Val Ser Cys Cys Leu Ala Gly His Val Cys Val Trp Asp Ala 485 490 Gln Thr Gly Asp Cys Leu Thr Arg Ile Pro Arg Pro Gly Arg Gln Arg 505 Arg Asp Ser Gly Val Gly Ser Gly Leu Glu Ala Gln Glu Ser Trp Glu 520 Arg Leu Ser Asp Gly Gly Lys Ala Gly Pro Glu Glu Pro Gly Asp Ser 535 540 Pro Pro Leu Arg His Arg Pro Arg Gly Pro Pro Pro Pro Ser Leu Phe 550 555 Gly Asp Gln Pro Asp Leu Thr Cys Leu Ile Asp Thr Asn Phe Ser Ala 565 570 Gln Pro Arg Ser Ser Gln Pro Thr Gln Pro Glu Pro Arg His Arg Ala 585 Val Cys Gly Arg Ser Arg Asp Ser Pro Gly Tyr Asp Phe Ser Cys Leu 600 Val Gln Arg Val Tyr Gln Glu Glu Gly Leu Ala Ala Val Cys Thr Pro 615 Ala Leu Arg Pro Pro Ser Pro Gly Pro Val Leu Ser Gln Ala Pro Glu

```
630
                                 635
Asp Glu Gly Gly Ser Pro Glu Lys Gly Ser Pro Ser Leu Ala Trp Ala
            645
                    650
Pro Ser Ala Glu Gly Ser Ile Trp Ser Leu Glu Leu Gln Gly Asn Leu
                          665
Ile Val Val Gly Arg Ser Ser Gly Arg Leu Glu Val Trp Asp Ala Ile
                      680
Glu Gly Val Leu Cys Cys Ser Ser Glu Glu Val Ser Ser Gly Ile Thr
                   695
                                     700
Ala Leu Val Phe Leu Asp Lys Arg Ile Val Ala Ala Arg Leu Asn Gly
                710
Ser Leu Asp Phe Phe Ser Leu Glu Thr His Thr Ala Leu Ser Pro Leu
            725
                             730
Gln Phe Arg Gly Thr Pro Gly Arg Gly Ser Ser Pro Ala Ser Pro Val
         740
                         745 750
Tyr Ser Ser Ser Asp Thr Val Ala Cys His Leu Thr His Thr Val Pro
                    760
Cys Ala His Gln Lys Pro Ile Thr Ala Leu Lys Ala Ala Ala Gly Arg
                   775 780
Leu Val Thr Gly Ser Gln Asp His Thr Leu Arg Val Phe Arg Leu Glu
                     795
                790
Asp Ser Cys Cys Leu Phe Thr Leu Gln Gly His Ser Gly Ala Ile Thr
                             810
Thr Val Tyr Ile Asp Gln Thr Met Val Leu Ala Ser Gly Gln Asp
         820
                          825
Gly Ala Ile Cys Leu Trp Asp Val Leu Thr Gly Ser Arg Val Ser His
                      840
Val Phe Ala His Arg Gly Asp Val Thr Ser Leu Thr Cys Thr Thr Ser
                   855
                           860
Cys Val Ile Ser Ser Gly Leu Asp Asp Leu Ile Ser Ile Trp Asp Arg
         870 875
Ser Thr Gly Ile Lys Phe Tyr Ser Ile Gln Gln Asp Leu Gly Cys Gly
            885
                             890
Ala Ser Leu Gly Val Ile Ser Asp Asn Leu Leu Val Thr Gly Gly Gln
      900 905
Gly Cys Val Ser Phe Trp Asp Leu Asn Tyr Gly Asp Leu Leu Gln Thr
     915 920
Val Tyr Leu Gly Lys Asn Ser Glu Ala Gln Pro Ala Arg Gln Ile Leu
                 935
                           940
Val Leu Asp Asn Ala Ala Ile Val Cys Asn Phe Gly Ser Glu Leu Ser
                                 955
Leu Val Tyr Val Pro Ser Val Leu Glu Lys Leu Asp *
                              970 972
```

<210> 1514 <211> 77 <212> PRT <213> Homo sapiens

Asn Leu Ile Ile Asp Ser Ser Leu Lys Ile Leu Ser Gln Glu Pro Ser 50 55 60

Asn Leu Trp Gln Arg Ile Pro Lys Met Met Thr Thr * 65 70 75 76

<210> 1515 <211> 148 <212> PRT <213> Homo sapiens

<400> 1515 Leu Gly Ser

Met Leu Gly Ser Arg Leu Met Thr Leu Thr Val Cys Ala Gly Ala Leu 5 Ala Arg Gly Arg Gly Thr Gly Thr Cys Glu Thr Arg Gln Glu Gly Lys 20 25 Gly Gln Asn His Ser Thr Leu Ala Trp Pro His Glu Glu Pro Gly Ala 40 Ser Thr Gly Arg Asp Gly Gly Lys Leu Pro Arg Gly Gln Cys Leu Leu 55 60 Glu Lys Gly Pro Gly Gly Ala Gly Asp Lys Val Ser Lys Ile Phe Pro 75 Ser Cys Ala Leu Ala Leu Leu Ser Leu Ala Asn Pro Gly Pro Arg Gly Pro Arg Glu Phe His Leu Cys Trp Gly Trp Leu Asp Arg Gly Val 100 105 Thr Gln Glu Ala Val His Val Gly Glu Lys Arg Gly Gly Leu Gly Ser 1:20 125 Gly Arg Lys Gly Gly Trp Trp Pro Gly Trp Asp Pro Gly Cys Arg Asp 135 Val Ile Thr * 145 147

<210> 1516 <211> 274 <212> PRT <213> Homo sapiens

<400> 1516

Met Arg Gly Ser Gln Glu Val Leu Leu Met Trp Leu Leu Val Leu Ala 5 10 Val Gly Gly Thr Glu His Ala Tyr Arg Pro Gly Arg Arg Val Cys Ala 20 25 Val Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val Gln Arg Val 40 45 Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg Ala Cys Ser Thr 55 60 Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg Ser Pro Gly Leu Ala Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro Gly Trp Lys Arg Thr Ser 85 90 Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg 105 Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly

115 120 125 Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg 135 140 Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp 150 Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys 165 170 Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Val 180 185 190 Asp Ser Ala Met Lys Glu Glu Val Gln Arg Leu Gln Ser Arg Val Asp 200 205 Leu Leu Glu Glu Lys Leu Gln Leu Val Leu Ala Pro Leu His Ser Leu 220 . 215 Ala Ser Gln Ala Leu Glu His Gly Leu Pro Asp Pro Gly Ser Leu Leu 230 235 240 Val His Ser Phe Gln Gln Leu Gly Arg Ile Asp Ser Leu Ser Glu Gln 250 Ile Ser Phe Leu Glu Glu Gln Leu Gly Ser Cys Ser Cys Lys Lys Asp 265 Ser * 273

<210> 1517 <211> 246 <212> PRT

<213> Homo sapiens

<400> 1517 Met Thr Leu Phe Pro Val Leu Leu Phe Leu Val Ala Gly Leu Leu Pro 5 10 Ser Phe Pro Ala Asn Glu Asp Lys Asp Pro Ala Phe Thr Ala Leu Leu 25 Thr Thr Gln Thr Gln Val Gln Arg Glu Ile Val Asn Lys His Asn Glu 40 Leu Arg Arg Ala Val Ser Pro Pro Ala Arg Asn Met Leu Lys Met Glu Trp Asn Lys Glu Ala Ala Ala Asn Ala Gln Lys Trp Ala Asn Gln Cys 65 70 75 80 Asn Tyr Arg His Ser Asn Pro Lys Asp Arg Met Thr Ser Leu Lys Cys 90 95 85 Gly Glu Asn Leu Tyr Met Ser Ser Ala Ser Ser Ser Trp Ser Gln Ala 105 110 Ile Gln Ser Trp Phe Asp Glu Tyr Asn Asp Phe Asp Phe Gly Val Gly 120 Pro Lys Thr Pro Asn Ala Val Val Gly His Tyr Thr Gln Val Val Trp 135 Tyr Ser Ser Tyr Leu Val Gly Cys Gly Asn Ala Tyr Cys Pro Asn Gln 145 150 Lys Val Leu Lys Tyr Tyr Tyr Val Cys Gln Tyr Cys Pro Ala Gly Asn 165 170 175 Trp Ala Asn Arg Leu Tyr Val Pro Tyr Glu Gln Gly Ala Pro Cys Ala 185 Ser Cys Pro Asp Asn Cys Asp Asp Gly Leu Cys Thr Asn Gly Cys Lys 200 Tyr Glu Asp Leu Tyr Ser Asn Cys Lys Ser Leu Lys Leu Thr Leu Thr

Cys Lys His Gln Leu Val Arg Asp Ser Cys Lys Ala Ser Cys Asn Cys 225 230 235 240
Ser Asn Ser Ile Tyr *

<210> 1518 <211> 122 <212> PRT <213> Homo sapiens

<400> 1518 Met Arg Asn Arg Arg Thr Glu Arg Thr Cys Thr Pro Pro Leu Ala Ser 10 Pro Tyr Asn Leu Val Pro His Leu Gln Asn Leu Leu Ala Val Leu Leu 25 Met Ile Leu Val Leu Thr Pro Met Val Leu Asn Pro His Lys Leu Tyr 40 Gln Met Met Thr Gln Asn Ile Leu Leu Gln Lys Pro Gln Lys Asn Phe . 50 55 60 Ile Trp Thr Ala Leu Lys Gly Asn Leu Ser Tyr Pro Arg Asn Leu Leu 70 75 Leu Gln Ser His Leu Ser Leu Leu Leu His Ser Leu Leu Leu Glu Leu 90 Asn Gln Arg Val Cys Leu Leu Pro Arg Ser Leu Ile Asp Pro Gly Lys 100 105 Arg Leu Lys Lys Pro Met Glu Thr Phe

120

<210> 1519 <211> 249 <212> PRT <213> Homo sapiens

115

<400> 1519 Met Gly Leu Ser Ile Phe Leu Leu Cys Val Leu Gly Leu Ser Gln 10 Ala Ala Thr Pro Lys Ile Phe Asn Gly Thr Glu Cys Gly Arg Asn Ser 25 Gln Pro Trp Gln Val Gly Leu Phe Glu Gly Thr Ser Leu Arg Cys Gly 35 . Gly Val Leu Ile Asp His Arg Trp Val Leu Thr Ala Ala His Cys Ser ·55 Gly Ser Arg Tyr Trp Val Arg Leu Gly Glu His Ser Leu Ser Gln Leu 70 75 80 Asp Trp Thr Glu Gln Ile Arg His Ser Gly Phe Ser Val Thr His Pro 85 90 Gly Tyr Leu Gly Ala Ser Thr Ser His Glu His Asp Leu Arg Leu Leu 105 Arg Leu Arg Leu Pro Val Arg Val Thr Ser Ser Val Gln Pro Leu Pro 120 125 Leu Pro Asn Asp Cys Ala Thr Ala Gly Thr Glu Cys His Val Ser Gly 135 Trp Gly Ile Thr Asn His Pro Arg Asn Pro Phe Pro Asp Leu Leu Gln

<210> 1520 <211> 292 <212> PRT <213> Homo sapiens

<400> 1520

Met Leu Val Leu Gln Ile Leu Leu Cys Ile Arg Glu Phe Ile Leu Glu 10 Arg Ser Leu Ile Asn Val Lys Asn Val Ala Lys Ser Leu Ala Val Val 20 25 Leu Ala Leu Leu Asn Ile Gly Lys Phe Ile Leu Glu Lys Ile Phe Thr 40 Asn Ala Lys Tyr Val Leu Asn Leu Leu Leu Val Ser Gln Ile Leu Leu . 55 Cys Met Arg Glu Phe Ile Leu Glu Arg Asn Pro Ile Asn Val Lys Asn 70 Val Ala Lys Pro Phe Leu Ile Val His Thr Leu Phe Asp Ile Ile Glu Phe Ile Leu Glu Lys Asn His Thr Asn Val Lys His Val Ala Asn Leu 100 105 110 Leu Val Thr Pro Gln Val Leu Leu Cys Ile Gly Glu Leu Ile Leu Glu 115 120 Arg Asn Pro Ile His Val Lys Asn Val Ala Lys Pro Leu Val Ile Val 135 Gln Met Leu Phe Ser Ile Gly Glu Phe Ile Leu Ala Arg Asp Pro Thr 150 155 Asn Val Lys Asn Val Ala Lys Pro Ser Thr Ile Gly His Thr Ser Leu 170 His Ile Lys Glu Val Ile Leu Glu Arg Asp Pro Thr Asn Val Lys Asn 185 190 Val Ala Lys Pro Ser Thr Leu Gly His Thr Ser Leu His Ile Gly Glu 200 205 Asp Ile Leu Glu Arg Asp Pro Thr Asn Val Met Asn Val Val Lys Pro 215 220 Ser Ala Ile Gly His Thr Ser Leu His Ile Gly Glu Val Ile Val Glu 230 235 Arg Asp Pro Thr Asn Val Lys Asn Val Ala Lys Pro Leu Thr Leu Gly 250 His Thr Ser Leu His Ile Arg Glu Val Ile Leu Glu Lys Asn Phe Lys 265 Asn Val Lys His Gly Ala Asp Phe Leu Leu Val Thr His Val Leu Leu 275 280

Cys Ile Arg * 290 291

<210> 1521

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1521

Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly 1. 5 10 Val Cys Ala Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys 25 Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu 55 Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser 70 75 Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser 85 90 Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met 100 105 Tyr Tyr Cys Ala Arg His Thr Val Arg Glu Thr Ser Pro Glu Pro Val 125 128

<210> 1522

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1522

 Met
 Val
 Val
 Leu
 Pro
 Cys
 Phe
 Ala
 Val
 Leu
 Lys
 Leu
 Leu
 Phe
 Gly

 Gln
 Ser
 Lys
 Leu
 Gly
 Pro
 Met
 Gln
 Pro
 Ser
 Gln
 Ser
 Gly
 Leu
 Asp
 Pro

 Val
 Gly
 Ala
 Gly
 Met
 Ser
 Ala
 Ser
 Ile
 Ala
 Asp
 Gly
 Ser
 Arg
 Ala
 Thr

 Ala
 Asp
 Lys
 Ala
 Val
 Leu
 Leu
 Asp
 Pro
 Thr
 Ser
 Leu
 Leu
 Glu
 Tyr

 50
 55
 55
 60
 60
 60
 60
 60
 60

<210> 1523 <211> 131

<212> PRT

<213> Homo sapiens

<400> 1523 Met Ile Leu Leu Ala Phe Leu Val Cys Trp Gly Pro Leu Phe Gly Leu 5 10 Leu Leu Ala Asp Val Phe Gly Ser Asn Leu Trp Ala Gln Glu Tyr Leu 20 25 Arg Gly Met Asp Trp Ile Leu Ala Leu Ala Val Leu Asn Ser Ala Val 40 Asn Pro Ile Ile Tyr Ser Phe Arg Ser Arg Glu Val Cys Arg Ala Val 55 60 Leu Ser Phe Leu Cys Cys Gly Cys Leu Arg Leu Gly Met Arg Gly Pro Gly Asp Cys Leu Ala Arg Ala Val Glu Ala His Ser Gly Ala Ser Thr 90 Thr Asp Ser Ser Leu Arg Pro Arg Asp Ser Phe Arg Gly Ser Arg Ser 100 105 110 Leu Ser Phe Arg Met Arg Glu Pro Leu Ser Ser Ile Ser Ser Val Arg 120 125 Ser Ile * 130

<210> 1524 <211> 52 <212> PRT <213> Homo sapiens

<400> 1524

<210> 1525 <211> 246 <212> PRT <213> Homo sapiens

<400> 1525

 Met
 Thr
 Leu
 Phe
 Pro
 Val
 Leu
 Leu
 Phe
 Leu
 Val
 Ala
 Ala
 Leu
 Pro
 Ala
 Ala
 Pro
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Leu
 Leu
 Leu
 Ala
 Ala
 Leu
 Leu
 Leu
 Ala
 Ala</th

Gly Glu Asn Leu Tyr Met Ser Ser Ala Ser Ser Ser Trp Ser Gln Ala 105 110 Ile Gln Ser Trp Phe Asp Glu Tyr Asn Asp Phe Asp Phe Gly Val Gly 115 120 Pro Lys Thr Pro Asn Ala Val Val Gly His Tyr Thr Gln Val Val Trp 135 Tyr Ser Ser Tyr Leu Val Gly Cys Gly Asn Ala Tyr Cys Pro Asn Gln 145 150 155 Lys Val Leu Lys Tyr Tyr Val Cys Gln Tyr Cys Pro Ala Gly Asn 165 Trp Ala Asn Arg Leu Tyr Val Pro Tyr Glu Gln Gly Ala Pro Cys Ala 180 185 Ser Cys Pro Asp Asn Cys Asp Asp Gly Leu Cys Thr Asn Gly Cys Lys 200 Tyr Glu Asp Leu Tyr Ser Asn Cys Lys Ser Leu Lys Leu Thr Leu Thr 220 215 Cys Lys His Gln Leu Val Arg Asp Ser Cys Lys Ala Ser Cys Asn Cys 230 235 Ser Asn Ser Ile Tyr *

<210> 1526 <211> 47 <212> PRT

<213> Homo sapiens

<400> 1526

.<210> 1527
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1527

 Met Ser Ala Arg Gly Trp
 Pro Cys Glu Ala Phe Val Leu Ala Gln Val 1
 5
 10
 15
 15

 Cys Trp
 Cys Trp Leu Cys Val Arg Gly Arg Leu Cys Glu Ala Leu Thr 20
 25
 30
 30
 15

 Leu Ala Gln Val Arg Arg His Gln Val Cys Val Pro Gly Gln Pro Cys 35
 40
 45
 45
 45

 Glu Ala Leu Thr Leu Thr Gln Val Arg Arg His Gln Val Gln Leu Cys Val Trp 50
 55
 60
 60
 55
 60

 Gly Arg Pro Cys Glu Ala Leu Thr Leu Thr Leu Ala Gln Val Cys Trp Leu Trp 65
 70
 75
 80

 Leu Cys Val Gln Gly Trp Pro His Glu Ala Leu Thr Leu Ala Gln Val 85
 90
 95

 Arg Gln His Gln Val Cys Val Arg Gly Arg Pro Cys Glu Ala Leu Ser

100 105 110 Leu Ala Gln Val Arg * 115 117

<210> 1528 <211> 92

<212> PRT

<213> Homo sapiens

<400> 1528

 Met
 Lys
 Val
 Ser
 Ala
 Ala
 Ale Leu
 Ala
 Val
 Ile
 Leu
 Ile
 Leu
 Ile
 Ala
 Thr
 Ala

 Leu
 Cys
 Ala
 Pro
 Ala
 Ser
 Ala
 Ser
 Pro
 Tyr
 Ser
 Ser
 Asp
 Thr
 Thr
 Pro
 Tyr
 Ser
 Asp
 Pro
 Asp
 Asp
 Asp
 Pro
 Asp
 Asp
 Asp
 Inc
 Lys
 Inc
 Asp
 Inc
 Asp
 Inc
 Inc
 Asp
 Inc
 Asp
 Inc
 Inc
 Inc
 Inc
 Asp
 Inc
 Inc</

<210> 1529 <211> 71 <212> PRT <213> Homo sapiens

<400> 1529

<210> 1530 <211> 85 <212> PRT <213> Homo sapiens

<210> 1531 <211> 60 <212> PRT <213> Homo sapiens

<210> 1532 <211> 53 <212> PRT <213> Homo sapiens

<210> 1533 <211> 741 <212> PRT <213> Homo sapiens

Trp Lys Leu Val Ser Glu Met Lys Ala Glu Asn Ile Lys Ser Phe Leu Arg Ser Phe Thr Lys Leu Pro His Leu Ala Gly Thr Glu Gln Asn Phe Leu Leu Ala Lys Lys Ile Gln Thr Gln Trp Lys Lys Phe Gly Leu Asp Ser Ala Lys Leu Val His Tyr Asp Val Leu Leu Ser Tyr Pro Asn Glu Thr Asn Ala Asn Tyr Ile Ser Ile Val Asp Glu His Glu Thr Glu Ile Phe Lys Thr Ser Tyr Leu Glu Pro Pro Pro Asp Gly Tyr Glu Asn Val Thr Asn Ile Val Pro Pro Tyr Asn Ala Phe Ser Ala Gln Gly Met Pro Glu Gly Asp Leu Val Tyr Val Asn Tyr Ala Arg Thr Glu Asp Phe Phe Lys Leu Glu Arg Glu Met Gly Ile Asn Cys Thr Gly Lys Ile Val Ile Ala Arg Tyr Gly Lys Ile Phe Arg Gly Asn Lys Val Lys Asn Ala Met Leu Ala Gly Ala Ile Gly Ile Ile Leu Tyr Ser Asp Pro Ala Asp Tyr Phe Ala Pro Glu Val Gln Pro Tyr Pro Lys Gly Trp Asn Leu Pro Gly Thr Ala Ala Gln Arg Gly Asn Val Leu Asn Leu Asn Gly Ala Gly Asp Pro Leu Thr Pro Gly Tyr Pro Ala Lys Glu Tyr Thr Phe Arg Leu Asp Val Glu Glu Gly Val Gly Ile Pro Arg Ile Pro Val His Pro Ile Gly Tyr Asn Asp Ala Glu Ile Leu Leu Arg Tyr Leu Gly Gly Ile Ala Pro Pro Asp Lys Ser Trp Lys Gly Ala Leu Asn Val Ser Tyr Ser Ile Gly Pro Gly Phe Thr Gly Ser Asp Ser Phe Arg Lys Val Arg Met His Val Tyr Asn Ile Asn Lys Ile Thr Arg Ile Tyr Asn Val Val Gly Thr Ile 345 350 Arg Gly Ser Val Glu Pro Asp Arg Tyr Val Ile Leu Gly Gly His Arg Asp Ser Trp Val Phe Gly Ala Ile Asp Pro Thr Ser Gly Val Ala Val Leu Gln Glu Ile Ala Arg Ser Phe Gly Lys Leu Met Ser Lys Gly Trp Arg Pro Arg Arg Thr Ile Ile Phe Ala Ser Trp Asp Ala Glu Glu Phe Gly Leu Leu Gly Ser Thr Glu Trp Ala Glu Glu Asn Val Lys Ile Leu Gln Glu Arg Ser Ile Ala Tyr Ile Asn Ser Asp Ser Ser Ile Glu Gly Asn Tyr Thr Leu Arg Val Asp Cys Thr Pro Leu Leu Tyr Gln Leu Val Tyr Lys Leu Thr Lys Glu Ile Pro Ser Pro Asp Asp Gly Phe Glu Ser Lys Phe Leu Tyr Glu Ser Trp Val Glu Lys Asp Pro Ser Pro Glu Asn Lys Asn Leu Pro Arg Ile Asn Lys Leu Gly Ser Gly Ser Asp Phe Glu

```
Ala Tyr Phe Gln Arg Leu Gly Ile Ala Ser Gly Arg Ala Arg Tyr Thr
                        520
Lys Asn Lys Lys Thr Asp Lys Tyr Ser Ser Tyr Pro Val Tyr His Thr
                   535
Ile Tyr Glu Thr Phe Glu Leu Val Glu Lys Phe Tyr Asp Pro Thr Phe
              550
                                  555
Lys Lys Gln Leu Ser Val Ala Gln Leu Arg Gly Ala Leu Val Tyr Glu
Leu Val Asp Ser Lys Ile Ile Pro Phe Asn Ile Gln Asp Tyr Ala Glu
         580 585
Ala Leu Lys Asn Tyr Ala Ala Ser Ile Tyr Asn Leu Ser Lys Lys His
      595 600
Asp Gln Gln Leu Thr Asp His Gly Val Ser Phe Asp Ser Leu Phe Ser
                            620
                    615
Ala Val Lys Asn Phe Ser Glu Ala Ala Ser Asp Phe His Lys Arg Leu
       630 635
Ile Gln Val Asp Leu Asn Asn Pro Ile Ala Val Arg Met Met Asn Asp
                              650
Gln Leu Met Leu Leu Glu Arg Ala Phe Ile Asp Pro Leu Gly Leu Pro
                           665
Gly Lys Leu Phe Tyr Arg His Ile Ile Phe Ala Pro Ser Ser His Asn
                       680
Lys Tyr Ala Gly Glu Ser Phe Pro Gly Ile Tyr Asp Ala Ile Phe Asp
  690 695
                              700
Ile Glu Asn Lys Ala Asn Ser Arg Leu Ala Trp Lys Glu Val Lys Lys
705 710 715
His Ile Ser Ile Ala Ala Phe Thr Ile Gln Ala Ala Ala Gly Thr Leu
            725
                              730
Lys Glu Val Leu *
          740
```

<210> 1534 <211> 50 <212> PRT

<213> Homo sapiens

49

<210> 1535 <211> 973 <212> PRT <213> Homo sapiens

<400> 1535
Met Val Lys Ser Lys Trp Gly Leu Ala Leu Ala Ala Val Val Thr Val

Leu Ser Ser Leu Leu Met Ser Val Gly Leu Cys Thr Leu Phe Gly Leu Thr Pro Thr Leu Asn Gly Gly Glu Ile Phe Pro Tyr Leu Val Val Val Ile Gly Leu Glu Asn Val Leu Val Leu Thr Lys Ser Val Val Ser Thr Pro Val Asp Leu Glu Val Lys Leu Arg Ile Ala Gln Gly Leu Ser Ser Glu Ser Trp Ser Ile Met Lys Asn Met Ala Thr Glu Leu Gly Ile Ile Leu Ile Gly Tyr Phe Thr Leu Val Pro Ala Ile Gln Glu Phe Cys Leu Phe Ala Val Val Gly Leu Val Ser Asp Phe Phe Leu Gln Met Leu Phe Phe Thr Thr Val Leu Ser Ile Asp Ile Arg Arg Met Glu Leu Ala Asp Leu Asn Lys Arg Leu Pro Pro Glu Ala Cys Leu Pro Ser Ala Lys Pro Val Gly Gln Pro Thr Arg Tyr Glu Arg Gln Leu Ala Val Arg Pro Ser Thr Pro His Thr Ile Thr Leu Gln Pro Ser Ser Phe Arg Asn Leu Arg Leu Pro Lys Arg Leu Arg Val Val Tyr Phe Leu Ala Arg Thr Arg Leu Ala Gln Arg Leu Ile Met Ala Gly Thr Val Val Trp Ile Gly Ile Leu Val Tyr Thr Asp Pro Ala Gly Leu Arg Asn Tyr Leu Ala Ala Gln Val Thr Glu Gln Ser Pro Leu Gly Glu Gly Ala Leu Ala Pro Met Pro Val Pro Ser Gly Met Leu Pro Pro Ser His Pro Asp Pro Ala Phe Ser Ile Phe Pro Pro Asp Ala Pro Lys Leu Pro Glu Asn Gln Thr Ser Pro Gly Glu Ser Pro Glu Arg Gly Gly Pro Ala Glu Val Val His Asp Ser Pro Val Pro Glu Val Thr Trp Gly Pro Glu Asp Glu Glu Leu Trp Arg Lys Leu Ser Phe Arg His Trp Pro Thr Leu Phe Ser Tyr Tyr Asn Ile Thr Leu Ala Lys Arg Tyr Ile Ser Leu Leu Pro Val Ile Pro Val Thr Leu 345 350 Arg Leu Asn Pro Arg Glu Ala Leu Glu Gly Arg His Pro Gln Asp Gly Arg Ser Ala Trp Pro Pro Pro Gly Pro Ile Pro Ala Gly His Trp Glu Ala Gly Pro Lys Gly Pro Gly Gly Val Gln Ala His Gly Asp Val Thr Leu Tyr Lys Val Ala Ala Leu Gly Leu Ala Thr Gly Ile Val Leu Val Leu Leu Leu Cys Leu Tyr Arg Val Leu Cys Pro Arg Asn Tyr Gly Gln Leu Gly Gly Pro Gly Arg Arg Arg Gly Glu Leu Pro Cys Asp Asp Tyr Gly Tyr Ala Pro Pro Glu Thr Glu Ile Val Pro Leu Val Leu Arg Gly His Leu Met Asp Ile Glu Cys Leu Ala Ser Asp Gly Met

Leu Leu Val Ser Cys Cys Leu Ala Gly His Val Cys Val Trp Asp Ala 490 Gln Thr Gly Asp Cys Leu Thr Arg Ile Pro Arg Pro Gly Arg Gln Arg 505 500 Arg Asp Ser Gly Val Gly Ser Gly Leu Glu Ala Gln Glu Ser Trp Glu 520 Arg Leu Ser Asp Gly Gly Lys Ala Gly Pro Glu Glu Pro Gly Asp Ser 540 535 Pro Pro Leu Arg His Arg Pro Arg Gly Pro Pro Pro Pro Ser Leu Phe 550 555 560 Gly Asp Gln Pro Asp Leu Thr Cys Leu Ile Asp Thr Asn Phe Ser Ala 570 Gln Pro Arg Ser Ser Gln Pro Thr Gln Pro Glu Pro Arg His Arg Ala 585 590 Val Cys Gly Arg Ser Arg Asp Ser Pro Gly Tyr Asp Phe Ser Cys Leu 600 Val Gln Arg Val Tyr Gln Glu Glu Gly Leu Ala Ala Val Cys Thr Pro 615 620 Ala Leu Arg Pro Pro Ser Pro Gly Pro Val Leu Ser Gln Ala Pro Glu 635 630 Asp Glu Gly Gly Ser Pro Glu Lys Gly Ser Pro Ser Leu Ala Trp Ala 645 650 Pro Ser Ala Glu Gly Ser Ile Trp Ser Leu Glu Leu Gln Gly Asn Leu 665 Ile Val Val Gly Arg Ser Ser Gly Arg Leu Glu Val Trp Asp Ala Ile 680 Glu Gly Val Leu Cys Cys Ser Ser Glu Glu Val Ser Ser Gly Ile Thr 695 Ala Leu Val Phe Leu Asp Lys Arg Ile Val Ala Ala Arg Leu Asn Gly 710 715 Ser Leu Asp Phe Phe Ser Leu Glu Thr His Thr Ala Leu Ser Pro Leu 725 730 735 Gln Phe Arg Gly Thr Pro Gly Arg Gly Ser Ser Pro Ala Ser Pro Val 740 745 750 Tyr Ser Ser Ser Asp Thr Val Ala Cys His Leu Thr His Thr Val Pro 755 760 Cys Ala His Gln Lys Pro Ile Thr Ala Leu Lys Ala Ala Ala Gly Arg 770 775 780 Leu Val Thr Gly Ser Gln Asp His Thr Leu Arg Val Phe Arg Leu Glu 785 790 795 Asp Ser Cys Cys Leu Phe Thr Leu Gln Gly His Ser Gly Ala Ile Thr 810 Thr Val Tyr Ile Asp Gln Thr Met Val Leu Ala Ser Gly Gly Gln Asp 825 830 Gly Ala Ile Cys Leu Trp Asp Val Leu Thr Gly Ser Arg Val Ser His 840 845 Val Phe Ala His Arg Gly Asp Val Thr Ser Leu Thr Cys Thr Thr Ser 855 860 Cys Val Ile Ser Ser Gly Leu Asp Asp Leu Ile Ser Ile Trp Asp Arg 870 875 Ser Thr Gly Ile Lys Phe Tyr Ser Ile Gln Gln Asp Leu Gly Cys Gly 890 Ala Ser Leu Gly Val Ile Ser Asp Asn Leu Leu Val Thr Gly Gly Gln 905 Gly Cys Val Ser Phe Trp Asp Leu Asn Tyr Gly Asp Leu Leu Gln Thr 915 920 925 Val Tyr Leu Gly Lys Asn Ser Glu Ala Gln Pro Ala Arg Gln Ile Leu 935 940 Val Leu Asp Asn Ala Ala Ile Val Cys Asn Phe Gly Ser Glu Leu Ser

945 955 960
Leu Val Tyr Val Pro Ser Val Leu Glu Lys Leu Asp *
960
970 972

<210> 1536 <211> 75 <212> PRT <213> Homo sapiens

70 74

<210> 1537 <211> 96 <212> PRT <213> Homo sapiens

<400> 1537

 Met
 Asp
 Leu
 Gly
 Arg
 Val
 Phe
 Ile
 Thr
 Leu
 Ile
 Leu
 Arg
 Leu
 Leu
 Ile
 Arg
 Leu
 Leu
 Ile
 Leu
 Leu
 Leu
 Leu
 Leu
 Arg
 Leu
 Arg
 Leu
 Cys
 Glu
 Arg
 Pro
 Leu
 Cys
 Ile
 Arg
 Ile
 Arg
 Leu
 Arg
 Leu
 Cys
 Glu
 Arg
 Pro
 Ile
 Arg
 Ile
 Arg
 Leu
 Arg
 Ile
 Arg
 Ile</th

<210> 1538 <211> 318 <212> PRT <213> Homo sapiens

Pro Ile Thr Val Thr Gly Ala Gln Val Leu Ser Lys Val Gly Gly Ser 25 30 Val Leu Leu Val Ala Ala Arg Pro Pro Gly Phe Gln Val Arg Glu Ala Ile Trp Arg Ser Leu Trp Pro Ser Glu Glu Leu Leu Ala Thr Phe Phe 55 Arg Gly Ser Leu Glu Thr Leu Tyr His Ser Arg Phe Leu Gly Arg Ala 70 75 Gln Leu His Ser Asn Leu Ser Leu Glu Leu Gly Pro Leu Glu Ser Gly Asp Ser Gly Asn Phe Ser Val Leu Met Val Asp Thr Arg Gly Gln Pro 105 Trp Thr Gln Thr Leu Gln Leu Lys Val Tyr Asp Ala Val Pro Arg Pro 115 120 Val Val Gln Val Phe Ile Ala Val Glu Arg Asp Ala Gln Pro Ser Lys 135 Thr Cys Gln Val Phe Leu Ser Cys Trp Ala Pro Asn Ile Ser Glu Ile 145 150 155 Thr Tyr Ser Trp Arg Arg Glu Thr Thr Met Asp Phe Gly Met Glu Pro 165 170 His Ser Leu Phe Thr Asp Gly Gln Val Leu Ser Ile Ser Leu Gly Pro 185 190 Gly Asp Arg Asp Val Ala Tyr Ser Cys Ile Val Ser Asn Pro Val Ser 205 Trp Asp Leu Ala Thr Val Thr Pro Trp Asp Ser Cys His His Glu Ala 215 Ala Pro Gly Lys Ala Ser Tyr Lys Asp Val Leu Leu Val Val Val Pro 225 230 235 Val Ser Leu Leu Met Leu Val Thr Leu Phe Ser Ala Trp His Trp 245 250 255 Cys Pro Cys Ser Gly Pro His Leu Arg Ser Lys Gln Leu Trp Met Arg 265 270 Trp Asp Leu Gln Leu Ser Leu His Lys Val Thr Leu Ser Asn Leu Ile 275 280 Ser Thr Val Val Cys Ser Val Val His Gln Gly Leu Val Glu Gln Ile 290 295 300 His Thr Ala Leu Ile Lys Phe Pro Ser Leu Met Lys Lys 310 315

<210> 1539 <211> 157 <212> PRT <213> Homo sapiens

<400> 1539

 Met
 Ile
 Leu
 Gln
 Val
 Ser
 Gly
 Gly
 Pro
 Trp
 Thr
 Val
 Ala
 Leu
 Thr
 Ala

 Leu
 Leu
 Leu
 Leu
 Ile
 Ser
 Val
 Val
 Gln
 Ser
 Arg
 Ala
 Thr
 Pro

 Glu
 Asn
 Ser
 Val
 Tyr
 Gln
 Glu
 Arg
 Gln
 Cys
 Tyr
 Ala
 Phe
 Asn
 Gly

 Thr
 Gln
 Arg
 Val
 Arg
 Gly
 Leu
 Ile
 Tyr
 Asn
 Arg
 Glu
 Tyr
 Val

 Arg
 Pro
 Ile
 Gly
 Gly
 Leu
 Ile
 Tyr
 Asn
 Arg
 Glu
 Tyr
 Val
 Arg
 Ile
 Ile
 Ile
 Arg
 Ile
 Ile

<210> 1540 <211> 135 <212> PRT <213> Homo sapiens

-

<400> 1540 Met Gly Ser Ser Phe Ile Leu Ala Leu Leu Ala Val Leu Gln Gly 5 10 Leu Ser Ala Gly Val Leu Leu Glu Gln Ser Arg Ala Glu Val Lys Lys 20 25 Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Ala Ser Gly Tyr Arg Phe 40 Thr Ser Ala Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly Thr Ile Tyr Pro Ala Asp Ser Glu Val Arg Tyr Ser 70 Pro Ser Leu Gln Gly Gln Val Thr Leu Ser Val Asp Glu Ser Ile Ser 90 Thr Ala Tyr Leu Gln Trp Asn Ser Leu Arg Ala Ser Asp Thr Ala Thr 105 Tyr Tyr Cys Ala Arg Gln Ile Ile Gly Ala Leu Pro Thr Asp Pro Phe 120 Asp Leu Gly Gln Gly Thr

<210> 1541 <211> 72 <212> PRT <213> Homo sapiens

<210> 1542 <211> 369 <212> PRT <213> Homo sapiens

<400> 1542 Met Ala Pro Arg Thr Leu Val Leu Leu Ser Gly Ala Leu Ala Leu 5 10 Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser 20 25 Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr 40 Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln 55 60 Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr 70 75 Trp Asp Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His Arg 90 Val Asp Leu Gly Thr Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly 105 Ser His Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp 120 Arg Phe Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr 135 140 Ile Ala Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala 150 155 Ala Gln Thr Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu Gln 170 Leu Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr 180 185 Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr 195 200 His Met Thr His His Pro Ile Ser Asp His Glu Ala Thr Leu Arg Cys 210 215 220 Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg 230 235 Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro 250 Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val Pro Ser 260 265 Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro 275 280 Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Pro Thr Ile Pro 295 300 Ile Val Gly Ile Ile Ala Gly Leu Val Leu Phe Gly Ala Val Ile Thr 310 315 Gly Ala Val Val Ala Ala Val Met Trp Arg Arg Lys Ser Ser Asp Arg 330 Lys Gly Val Lys Asp Arg Lys Gly Gly Ser Tyr Ser Gln Ala Ala Ser 345 Ser Asp Ser Ala Gln Gly Ser Asp Val Ser Leu Thr Ala Cys Lys Val

360

<210> 1543 <211> 49 <212> PRT <213> Homo sapiens

<400> 1543

Met Arg Ser Leu Trp Lys Ala Asn Arg Ala Asp Leu Leu Ile Trp Leu 1 5 Val Thr Phe Thr Ala Thr Ile Leu Leu Asn Leu Asp Leu Gly Leu Glu 20 25 Asp Ala Val Ile Phe Ser Leu Leu Leu Glu Glu Val Arg Thr Gln Met 40 45

<210> 1544 <211> 121 <212> PRT <213> Homo sapiens

<400> 1544

Met Lys Ile Phe Lys Cys Tyr Phe Lys His Thr Leu Gln Gln Lys Val 10 Phe Ile Leu Phe Leu Thr Leu Trp Leu Leu Ser Leu Leu Lys Leu Leu 25 Asn Val Arg Arg Leu Phe Pro Gln Lys Asp Ile Tyr Leu Val Glu Tyr 40 Ser Leu Ser Thr Ser Pro Phe Val Arg Asn Arg Tyr Thr His Val Lys 55 Asp Glu Val Arg Tyr Glu Val Asn Cys Ser Gly Ile Tyr Glu Gln Glu 75 70 Pro Leu Glu Ile Gly Lys Ser Leu Glu Ile Arg Arg Arg Asp Ile Ile 85 90 Asp Leu Glu Asp Asp Val Val Ala Met Thr Ser Asp Cys Asp Ile 105 Tyr Gln Thr Leu Lys Gly Tyr Ala * 115

<210> 1545 <211> 70 <212> PRT <213> Homo sapiens

<400> 1545

Met Phe Leu Lys Trp Pro Leu Trp Val Leu Gln Tyr Val Val Cys 1 5 10 Ser Leu Lys Asp Lys Ile His Lys Phe Phe Tyr Ile Glu Arg Val Val 20 25 Gly Glu Leu Arg Val Leu Pro Gln Gly Trp Met Val Ala Leu Ile Leu 40 Arg Lys Asp Phe Val Leu Pro Ser Pro Ser Asp Val Val Asn Ala Ser

Gln Pro Gly Gln Val * 65 69

<210> 1546

<211> 58

<212> PRT

<213> Homo sapiens

<400> 1546

<210> 1547

<211> 65

<212> PRT

<213> Homo sapiens

<400> 1547

 Met
 Trp
 Leu
 His
 Glu
 Asn
 Leu
 Gln
 Phe
 Leu
 Leu
 Gln
 Leu
 Gln
 Leu
 Leu
 Leu
 Leu
 Ile
 Phe
 His

 Phe
 Tyr
 Tyr
 Tyr
 Tyr
 Tyr
 Tyr
 Tyr
 Lyr
 Val
 Ile
 Gln

 Fro
 Asp
 Asp
 Arg
 Pro
 Gly
 Pro
 Asn
 Pro
 Leu
 Leu
 Pro
 Leu
 Arg
 Met

 Asp
 Ala
 Trp
 His
 Leu
 Pro
 Gly
 His
 Asp
 Gly
 Leu
 Gly
 Arg
 Val
 Cys
 Thr

 Asp
 Ala
 Trp
 His
 Leu
 Pro
 Gly
 His
 Asp
 Gly
 Leu
 Gly
 Arg
 Val
 Cys
 Thr

 Asp
 Fro
 Fro
 Fro
 Fro
 Fro
 Gly
 Leu
 Gly
 Leu
 Gly
 Arg

<210> 1548

<211> 78

<212> PRT

<213> Homo sapiens

<400> 1548

 Met Phe Ile Ile Phe Leu Ala Phe Ile Ala Leu Lys Arg Ser Lys Ser

 1
 5
 10
 15

 Val Ile Gly Ala Phe Leu Tyr Leu Ala Ser Ile Phe Leu Ala His Gly
 30
 .

 Val Ala Ala His Ile Val Phe Met Ser Ala Phe Tyr Gln Ala Cys Arg
 45

 Thr Tyr Leu Trp Trp Ala Leu Cys Glu Asn Leu Arg Met Lys Ser Val
 50

 Ser Cys Met Leu Leu Leu Lys Gly Met Ala Cys Leu Leu Thr
 *

65 70 75 77

<210> 1549

<211> 54

<212> PRT

<213> Homo sapiens

<400> 1549

 Met Leu Tyr Ile Glu Cys Lys Ser His Lys Leu Val Ala Pro Leu Ala

 1
 5
 10
 15

 Val Phe Phe Ala Leu Phe Phe Leu Leu Ile Phe Phe Trp Val Ala Phe
 20
 25
 30

 Ser Tyr Pro Phe Glu Leu Leu Phe Leu Gln Leu Arg Ser Arg Gln Ala
 35
 40

Asp Ile Gly Val Gln * 50 53

<210> 1550

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1550

Met Val Asn Thr Trp Leu Ala Ala Cys Cys Thr Val Val Thr Trp Phe

1 5 10 15

Pro Lys Met Ser Met Leu Pro Leu Pro Ser Lys Pro Ser Ala Arg

Pro Lys Met Ser Met Leu Pro Leu Pro Pro Ser Lys Pro Ser Ala Arg
20 25 30

Ser Ser Leu Trp Ile Gly Ala Pro Leu Ala Ser Arg Leu Ala Ser Thr \cdot 35 40 45

Thr Ser Leu Pro Leu Trp Cys Leu Val Glu Thr Trp Pro Arg Tyr Arg 50 55 60

Glu Leu Cys Ala Cys *
65 69

<210> 1551

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1551

Ser Phe Leu Trp Gln Arg Gly Arg Lys Phe Leu Gln Lys His Leu Asn 65 70 75 80

Ala Ser Asn Pro Thr Glu Pro Ala Thr Ile Ile Phe Thr Ala Ala Arq 85 90 Glu Gly Arg Glu Thr Leu Lys Cys Leu Ser His His Val Ala Asp Ala 100 105 Tyr Thr Ser Ser Gln Lys Val Ser Pro Ile Gln Ile Asp Gly Ala Gly 115 120 125 Arg Thr Trp Gln Asp Ser Asp Thr Val Lys Leu Leu Val Asp Leu Glu 130 135 140 Leu Ser Tyr Gly Phe Glu Asn Gly Gln Lys Ala Ala Val Val His His 145 150 155 160 Phe Glu Ser Phe Pro Ala Gly Ser Thr Leu Ile Phe Tyr Lys Tyr Cys 165 170 175 Asp His Glu Asn Ala Ala Phe Lys Asp Val Ala Leu Val Leu Thr Val 185 Leu Leu Glu Glu Glu Thr Leu Glu Ala Ser Val Gly Pro Arg Glu Thr 200 Glu Glu Lys Val Arg Asp Leu Leu Trp Ala Lys Phe Thr Asn Ser * 210 215 220 223

<210> 1552 <211> 57 <212> PRT

<213> Homo sapiens

<210> 1553 <211> 241 <212> PRT <213> Homo sapiens

100 105 Asn Leu Gly Ala His Trp Gly Arg Tyr Arg Ser Pro Gly Phe His Val 125 120 Gln Ser Trp Tyr Asp Glu Val Lys Asp Tyr Thr Tyr Pro Tyr Pro Ser 140 135 Glu Cys Asn Pro Trp Cys Pro Glu Arg Cys Ser Gly Pro Met Cys Thr 145 150 155 His Tyr Thr Gln Ile Val Trp Ala Thr Thr Asn Lys Ile Gly Cys Ala 170 Val Asn Thr Cys Arg Lys Met Thr Val Trp Gly Glu Val Trp Glu Asn 180 185 190 Ala Val Tyr Phe Val Cys Asn Tyr Ser Pro Lys Gly Asn Trp Ile Gly 200 Glu Ala Pro Tyr Lys Asn Gly Arg Pro Cys Ser Glu Cys Pro Pro Ser 210 215 Tyr Gly Gly Ser Cys Arg Asn Asn Leu Cys Tyr Arg Glu Glu Thr Tyr 230 235 Thr 241

<210> 1554

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1554

<210> 1555

<211> 64

<212> PRT

<213> Homo sapiens

<400> 1555

<210> 1556

<211> 71 <212> PRT <213> Homo sapiens

<210> 1557 <211> 126 <212> PRT <213> Homo sapiens

Glu Glu Asp Asn Pro Val Ser Glu Leu Gln Val Phe Gln *

<210> 1558 <211> 135 <212> PRT <213> Homo sapiens

 Phe
 Gln
 Leu
 Pro
 His
 Lys
 Arg
 Glu
 Phe
 Ser
 Glu
 Glu
 Asp
 Glu
 Asp
 Glu
 Asp
 Glu
 Asp
 Glu
 Asp
 Asp
 Glu
 Asp
 A

<210> 1559 <211> 203 <212> PRT <213> Homo sapiens

<400> 1559 Met Glu Leu Trp Gly Ala Tyr Leu Leu Leu Cys Leu Phe Ser Leu Leu 1.0 Thr Gln Val Thr Thr Glu Pro Pro Thr Gln Lys Pro Lys Lys Ile Val 20 25 Asn Ala Lys Lys Asp Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys 40 Ser Arg Leu Asp Thr Leu Ala Gln Glu Val Ala Leu Leu Lys Glu Gln 55 Gln Ala Leu Gln Thr Val Cys Leu Lys Gly Thr Lys Val His Met Lys 70 75 Cys Phe Leu Ala Phe Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu 90 Asp Cys Ile Ser Arg Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser 105 Glu Asn Asp Ala Leu Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu 115 120 125 Ala Glu Ile Trp Leu Gly Leu Asn Asp Met Ala Ala Glu Gly Thr Trp 140 135 Val Asp Met Thr Gly Ala Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu 155 Ile Thr Ala Gln Pro Asp Gly Gly Lys Thr Glu Asn Cys Ala Val Leu 170 Ser Gly Ala Ala Asn Gly Lys Trp Phe Asp Lys Arg Cys Arg Asp Gln 185 Leu Pro Tyr Ile Cys Gln Phe Gly Ile Val * 200 202

<210> 1560 <211> 59 <212> PRT <213> Homo sapiens

<400> 1560
Met Met Gly Val Ser Gly Cys Met Val Leu Leu Ala Pro Leu Leu Ala
1 5 10 15

<210> 1561

<211> 50

<212> PRT

<213> Homo sapiens

<400> 1561

 Met
 Lys
 Phe
 Ser
 Asn
 Val
 Leu
 Cys
 Thr
 Cys
 Leu
 Leu
 Ile
 Leu
 Gln
 Lys

 Val
 Lys
 Leu
 Phe
 Tyr
 Lys
 Thr
 Val
 His
 Glu
 Asn
 Ser
 Phe
 Leu
 Pro

 Cys
 Phe
 Ser
 His
 Leu
 Ile
 Pro
 Ser
 Pro
 Gln
 Arg
 Asn
 Leu
 Ser
 Ser
 Ile

 Phe
 *
 40
 45
 *
 45
 *

<210> 1562

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1562

 Met
 Leu
 Phe
 Ser
 Ala
 Val
 Lys
 Leu
 Tyr
 Cys
 Cys
 Gln
 Phe
 Trp
 His
 Leu

 1
 5
 5
 10
 10
 15
 15

 Ile
 Leu
 Asn
 Arg
 Val
 Pro
 Ser
 Leu
 Leu
 Tyr
 Ser
 Cys
 Gly
 Leu

 Ser
 Thr
 Asn
 Val
 Leu
 Asn
 Thr
 Thr
 Val
 Cys
 Tyr
 Val
 Arg
 Asp
 Lys
 Lys

 35
 40
 40
 45
 48

<210> 1563

<211> 69

<212> PRT

<213> Homo sapiens

<400> 1563

50 55 60 His Lys Gln Pro * 65 68

<210> 1564 <211> 53 <212> PRT <213> Homo sapiens

<210> 1565 <211> 236 <212> PRT <213> Homo sapiens

<400> 1565 Met Pro Arg Arg Gly Leu Ile Leu His Thr Arg Thr His Trp Leu Leu 5 10 Leu Gly Leu Ala Leu Leu Cys Ser Leu Val Leu Phe Met Tyr Leu Leu 25 Glu Cys Ala Pro Gln Thr Asp Gly Asn Ala Ser Leu Pro Gly Val Val 40 Gly Glu Asn Tyr Gly Lys Glu Tyr Tyr Gln Ala Leu Leu Gln Glu Gln 55 Glu Glu His Tyr Gln Thr Arg Ala Thr Ser Leu Lys Arg Gln Ile Ala 70 Gln Leu Lys Gln Glu Leu Gln Glu Met Ser Glu Lys Met Arg Ser Leu Gln Glu Arg Arg Asn Val Gly Ala Asn Gly Ile Gly Tyr Gln Ser Asn Lys Glu Gln Ala Pro Ser Asp Leu Leu Glu Phe Leu His Ser Gln Ile 115 120 125 Asp Lys Ala Glu Val Ser Ile Gly Ala Lys Leu Pro Ser Glu Tyr Gly 140 130 135 Val Ile Pro Phe Glu Ser Phe Thr Leu Met Lys Val Phe Gln Leu Glu 145 150 155 160 Met Gly Leu Thr Arg His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys 175 170 Arg Asp Glu Leu Val Glu Val Ile Glu Ala Gly Leu Glu Val Ile Asn 185 Asn Pro Asp Glu Asp Glu Glu Glu Glu Glu Gly Pro Leu Gly 200 Glu Lys Leu Ile Phe Asn Glu Asn Asp Phe Val Glu Gly Tyr Tyr Arg 215 220

Thr Glu Arg Asp Lys Gly Thr Gln Tyr Glu Leu Phe 225 230 235 236

<210> 1566 <211> 77 <212> PRT <213> Homo sapiens

<210> 1567 <211> 104 <212> PRT <213> Homo sapiens

<400> 1567 Met Leu Ile Gly Leu Leu Ala Trp Leu Gln Thr Val Pro Ala His Gly 5 10 Cys Gln Phe Leu Pro Ile Thr Ser Val Thr Ala Thr Val Tyr His Leu 20 25 Pro Val His Gln Leu Lys Gly Arg Ser Arg Val Gln Lys Asn Leu Thr 40 Leu Asp Asn Glu Gly Glu Gly Thr Trp Thr Thr Cys Leu Glu Phe Leu 55 60 Glu Ser Leu Ala Gly Trp Arg Leu Gly Trp Gly Val Ser Arg Gly Val 70 Arg Glu Trp Leu Cys Leu Gln Gln Val Ser Leu His Gln Thr Pro Gly 85 90 Leu Pro His Lys Gln Asp Leu * 100 103

<210> 1568 <211> 46 <212> PRT <213> Homo sapiens

<400> 1568
Met Val Val Asn Thr Met Ile Tyr Phe Phe Ile Phe Thr Tyr Thr Leu
1 5 10 15
Ala Lys Arg Ala Arg Val His Ile Asn Lys Asn Gly Asn Lys Ala Leu

```
. 25
            20
Ala Glu Lys Asn Met His Leu Thr Asn His Val Asn Ser *
        35 40
     <210> 1569
     <211> 50
     <212> PRT
     <213> Homo sapiens
     <400> 1569
Met Leu Met Met Asp Thr Leu Trp Pro Ile Leu Leu Gln Thr Leu Lys
                                  10
Val Ile Ser Gln Val Gly His Ala Gly Pro Leu Ala Asn Met Ile His
                              25
Asp Asn Pro Cys Ile Ile Ala Tyr Arg Ile Thr Leu Arg Leu Val Gly
                           40
                                             45
Pro *
 49
    <210> 1570
    <211> 50
    <212> PRT
     <213> Homo sapiens
    <400> 1570
Met Val Gly Phe Asp Leu Leu Pro Leu Leu Phe Phe Pro Phe Phe
               5
                                 10
Pro Ser Leu Ile Phe Phe Pro Phe Phe Ser Ser Pro Ser Pro Ser Phe
                              25
Gln Phe Leu Pro His Gln Glu Lys Ser Gln His Val Phe Pro Pro Asn
                          40
Ala *
 49
     <210> 1571
     <211> 50
     <212> PRT
     <213> Homo sapiens
    <400> 1571
Met Tyr Leu Trp Val Val Arg Trp Lys Trp Cys Leu Gln Lys Leu Gly
1 5
                          1.0
Arg Arg Ile Leu Leu His Ser Leu His Asp Val Phe Ile Ala Asn Met
                              25
Asp Asp Lys Gly Leu Cys Tyr Arg Gly Leu Arg Ala Pro Ser Phe Leu
Leu *
 49
```

<210> 1572 <211> 80 <212> PRT <213> Homo sapiens

<400> 1572

 Met
 Ser
 Ser
 Gly
 Arg
 Asn
 Phe
 Gly
 Phe
 Cys
 Phe
 Gln
 Trp
 Leu
 Pro
 Trp

 1
 5
 10
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 16
 15
 15
 15
 16
 15
 16
 15
 16
 16
 16
 17
 16
 17
 16
 17
 17
 16
 17
 17
 17
 17
 17
 17
 17
 17
 17
 17
 17

<210> 1573 <211> 52 <212> PRT <213> Homo sapiens

<210> 1574 <211> 200 <212> PRT <213> Homo sapiens

<400> 1574

Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala Trp Ala 10 Ile Pro Gly Gly Leu Gly Val Met Ala Pro Leu Thr Ala Thr Ala Pro 20 25 Glu Val Asp Asp Glu Glu Met Tyr Ser Ala His Met Pro Ala His Leu 40 . Arg Cys Asp Ala Cys Arg Ala Val Ala Tyr Gln Glu Cys Gly Pro Lys 60 Thr Leu Ala Lys Ala Glu Thr Lys Leu His Thr Ser Asn Ser Gly Gly 70 75 Arg Arg Asp Val Ser Glu Leu Val Tyr Thr Asp Val Leu Asp Arg Ser 85 90 Cys Ser Arg Asn Trp Gln Asp Tyr Gly Val Arg Glu Val Asp Gln Val

```
. 105
          100
Lys Arg Leu Thr Gly Pro Gly Leu Ser Glu Gly Pro Glu Pro Ser Ile
              120
                               125
Ser Val Met Val Thr Gly Gly Pro Trp His Thr Arg Leu Ser Arg Thr
                             140
                    135
Cys Leu His Tyr Leu Gly Glu Phe Gly Glu Asp Gln Ile Tyr Glu Ala
145 150
                      155
His Gln Gln Gly Arg Gly Ala Leu Glu Ala Leu Leu Cys Gly Gly Pro
             165 170
Pro Gly Gly Leu Leu Arg Glu Gly Val Ser His Lys Arg Arg Ala Leu
                           185
Val Leu Asp Ser Thr Leu Leu *
      195
             199
    <210> 1575
    <211> 51
    <212> PRT
    <213> Homo sapiens
    <221> misc feature .
    <222> (1)...(51)
    <223> Xaa = any amino acid or nothing
    <400> 1575
Met Leu Leu Gly Phe Gly Asn Val Phe Ile Leu Leu Ile Leu Xaa Thr
Ala Ile Leu Trp Leu Lys Gly Ser Gln Arg Val Pro Glu Glu Pro Gly
      20
                  25
Glu Gln Pro Ile Tyr Met Asn Phe Ser Glu Pro Leu Thr Lys Asp Met
                     40
Ala Thr *
   50
    <210> 1576
    <211> 124
    <212> PRT
    <213> Homo sapiens
    <400> 1576
Met Arg Ile Arg Leu Leu Cys Cys Val Ala Phe Ser Leu Leu Trp Ala
1 5
                  10 15
Gly Pro Val Ile Ala Gly Ile Thr Gln Ala Pro Thr Ser Gln Ile Leu
          20
                            25
Ala Ala Gly Arg Arg Met Thr Leu Arg Cys Thr Gln Asp Met Arg His
      35
                        40
Asn Ala Met Tyr Trp Tyr Arg Gln Asp Leu Gly Leu Gly Leu Arg Leu
                     55
Ile His Tyr Ser Asn Thr Ala Gly Thr Thr Gly Lys Gly Glu Val Pro
                 70
Asp Gly Tyr Ser Val Ser Arg Ala Asn Thr Asp Asp Phe Pro Leu Thr
             85
                               90
Leu Ala Ser Ala Val Pro Ser Gln Thr Ser Val Tyr Phe Cys Ala Ser
```

105 110

Ser Asp Gly Ala Ser Gly Ser Pro His Thr Gly Glu 115 120 124

> <210> 1577 <211> 860 <212> PRT <213> Homo sapiens

<400> 1577

Met Ala Cys Arg Trp Ser Thr Lys Glu Ser Pro Arg Trp Arg Ser Ala 1 5 10 Leu Leu Leu Phe Leu Ala Gly Val Tyr Gly Asn Gly Ala Leu Ala 25 Glu His Ser Glu Asn Val His Ile Ser Gly Val Ser Thr Ala Cys Gly 40 Glu Thr Pro Glu Gln Ile Arg Ala Pro Ser Gly Ile Ile Thr Ser Pro 55 60 Gly Trp Pro Ser Glu Tyr Pro Ala Lys Ile Asn Cys Ser Trp Phe Ile Arg Ala Asn Pro Gly Glu Ile Ile Thr Ile Ser Phe Gln Asp Phe Asp 85 90 Ile Gln Gly Ser Arg Arg Cys Asn Leu Asp Trp Leu Thr Ile Glu Thr 100 105 110 Tyr Lys Asn Ile Glu Ser Tyr Arg Ala Cys Gly Ser Thr Ile Pro Pro 120 125 Pro Tyr Ile Ser Ser Gln Asp His Ile Trp Ile Arg Phe His Ser Asp 135 140 Asp Asn Ile Ser Arg Lys Gly Phe Arg Leu Ala Tyr Phe Ser Gly Lys 150 155 Ser Glu Glu Pro Asn Cys Ala Cys Asp Gln Phe Arg Cys Gly Asn Gly 170 165 Lys Cys Ile Pro Glu Ala Trp Lys Cys Asn Asn Met Asp Glu Cys Gly 185 190 Asp Arg Ser Asp Glu Glu Ile Cys Ala Lys Glu Ala Asn Pro Pro Thr 200 Ala Ala Ala Phe Gln Pro Cys Ala Tyr Asn Gln Phe Gln Cys Leu Ser 210 215 Arg Phe Thr Lys Val Tyr Thr Cys Leu Pro Glu Ser Leu Lys Cys Asp 225 230 235 240 Gly Asn Ile Asp Cys Leu Asp Leu Gly Asp Glu Ile Asp Cys Asp Val 245 250 255 Pro Thr Cys Gly Gln Trp Leu Lys Tyr Phe Tyr Gly Thr Phe Asn Ser 260 265 Pro Asn Tyr Pro Asp Phe Tyr Pro Pro Gly Ser Asn Cys Thr Trp Leu 275 280 Ile Asp Thr Gly Asp His Arg Lys Val Ile Leu Arg Phe Thr Asp Phe 290 295 300 Lys Leu Asp Gly Thr Gly Tyr Gly Asp Tyr Val Lys Ile Tyr Asp Gly 310 315 Leu Glu Glu Asn Pro His Lys Leu Leu Arg Val Leu Thr Ala Phe Asp 325 330 Ser His Ala Pro Leu Thr Val Val Ser Ser Ser Gly Gln Ile Arg Val 345 His Phe Cys Ala Asp Lys Val Asn Ala Ala Arg Gly Phe Asn Ala Thr 360 Tyr Gln Val Asp Gly Phe Cys Leu Pro Trp Glu Ile Pro Cys Gly Gly

| | 370 | | | | | 375 | | | | | 380 | | | | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asn 385 | Trp | Gly | Суз | Tyr | Thr 390 | Glu | Gln | Gln | Arg | Cys 395 | Asp | Gly | Tyr | Trp | His 400 |
| | Pro | Asn | Gly | Arg 405 | | Glu | Thr | Asn | Cys 410 | | Met | Cys | Gln | Lys 415 | |
| Glu | Phe | Pro | Cys 420 | | Arg | Asn | Gly | Val 425 | | Tyr | Pro | Arg | Ser | | Arg |
| Суѕ | Asn | Tyr 435 | Gln | Asn | His | Cys | Pro | | Gly | Ser | Asp | Glu 445 | | Asn | Суѕ |
| | Phe 450 | | Gln | Pro | Gly | Asn 455 | | His | Cys | Lys | Asn 460 | | Arg | Cys | Val |
| | | Ser | Trp | Val | Cys 470 | | Ser | Gln | Asp | Asp 475 | | Gly | Asp | Gly | |
| | Glu | Glu | Asn | Cys 485 | | Val | Ile | Val | | | Arg | Val | Ile | | 480 Ala |
| Ala | Val | Ile | Gly 500 | - | Leu | Ile | Cys | | 490 Leu | Leu | Leu | Val | | 495 Ala | Leu |
| Gly | Cys | Thr 515 | Суз | Lys | Leu | Tyr | Ser 520 | 505 Leu | Arg | Met | Phe | | 510 Arg | Arg | Ser |
| Phe | Glu 530 | | Gln | Leu | Ser | Arg 535 | _ | Glu | Ala | Glu | Leu 540 | 525 Leu | Arg | Arg | Glu |
| Ala 545 | | Pro | Ser | Tyr | Gly 550 | | Leu | Ile | Ala | Gln 555 | | Leu | Ile | Pro | Pro 560 |
| | Glu | Asp | Phe | Pro 565 | | Cys | Ser | Pro | Asn 570 | | Ala | Ser | Val | Leu 575 | |
| Asn | Leu | Arg | Leu 580 | | Val | Arg | Ser | Gln 585 | | Gly | Phe | Thr | Ser | | Arg |
| Leu | Pro | Met 595 | Ala | Gly | Arg | Ser | Ser 600 | | Ile | Trp | Asn | Arg 605 | | Phe | Asn |
| Phe | Ala 610 | | Ser | Arg | His | Ser 615 | - | Ser | Leu | Ala | Leu 620 | | Ser | Ala | Asp |
| Gly 625 | | Glu | Val | Val | Pro 630 | | Gln | Ser | Thr | Ser 635 | | Glu | Pro | Glu | Arg 640 |
| | His | Thr | His | Arg 645 | | Leu | Phe | Ser | Val 650 | | Ser | Asp | Asp | Thr 655 | |
| Thr | Glu | Asn | Glu 660 | | Arg | Asp | Met | Ala 665 | | Ala | Ser | Gly | Gly 670 | | Ala |
| Ala | Pro | Leu 675 | Pro | Gln | Lys | Val | Pro 680 | | Thr | Thr | Ala | Val 685 | | Ala | Thr |
| Val | Gly 690 | Ala | Cys | Ala | Ser | Ser 695 | Ser | Thr | Gln | Ser | Thr 700 | Arg | Gly | Gly | His |
| Ala 705 | Asp | Asn | Gly | Arg | Asp 710 | Val | Thr | Ser | Val | Glu 715 | Pro | Pro | Ser | Val | Ser 720 |
| Pro | Ala | Arg | His | Gln 725 | Leu | Thr | Ser | Ala | Leu 730 | Ser | Arg | Met | Thr | Gln 735 | |
| Leu | Arg | Trp | Val 740 | Arg | Phe | Thr | Leu | Gly 745 | Arg | Ser | Ser | Ser | Leu 750 | Ser | Gln |
| Asn | Gln | Ser 755 | Pro | Leu | Arg | Gln | Leu 760 | Asp | Asn | Gly | Val | Ser 765 | Gly | Arg | Glu |
| Asp | Asp 770 | Asp | Asp | Val | Glu | Met 775 | Leu | Ile | Pro | Ile | Ser 780 | Asp | Gly | Ser | Ser |
| Asp 785 | Phe | Asp | Val | Asn | Asp 790 | Cys | Ser | Arg | Pro | Leu 795 | Leu | Asp | Leu | Ala | Ser 800 |
| Asp | Gln | Gly | Gln | Gly 805 | Leu | Arg | Gln | Pro | Tyr 810 | Asn | Ala | Thr | Asn | Pro 815 | Gly |
| Val | Arg | Pro | Ser 820 | Asn | Arg | Asp | Gly | Pro 825 | Cys | Glu | Arg | Cys | Gly 830 | Ile | Val |
| His | Thr | Ala 835 | Gln | Ile | Pro | Asp | Thr 840 | Cys | Leu | Glu | Val | Thr 845 | Leu | Lys | Asn |

Glu Thr Ser Asp Asp Glu Ala Leu Leu Leu Cys * 850 859

<210> 1578 <211> 58 <212> PRT <213> Homo sapiens

_

<210> 1579 <211> 572 <212> PRT <213> Homo sapiens

<400> 1579 Met Arg Arg Arg Ser Arg Met Leu Leu Cys Phe Ala Phe Leu Trp Val 10 Leu Gly Ile Ala Tyr Tyr Met Tyr Ser Gly Gly Gly Ser Ala Leu Ala Gly Gly Ala Gly Gly Ala Gly Arg Lys Glu Asp Trp Asn Glu Ile 40 Asp Pro Ile Lys Lys Lys Asp Leu His His Ser Asn Gly Glu Glu Lys 55 60 Ala Gln Ser Met Glu Thr Leu Pro Pro Gly Lys Val Arg Trp Pro Asp 70 75 Phe Asn Gln Glu Ala Tyr Val Gly Gly Thr Met Val Arg Ser Gly Gln Asp Pro Tyr Ala Arg Asn Lys Phe Asn Gln Val Glu Ser Asp Lys Leu 100 105 110 Arg Met Asp Arg Ala Ile Pro Asp Thr Arg His Asp Gln Cys Gln Arg 115 120 125 Lys Gln Trp Arg Val Asp Leu Pro Ala Thr Ser Val Val Ile Thr Phe 135 140 His Asn Glu Ala Arg Ser Ala Leu Leu Arg Thr Val Val Ser Val Leu 150 155 Lys Lys Ser Pro Pro His Leu Ile Lys Glu Ile Ile Leu Val Asp Asp 170 Tyr Ser Asn Asp Pro Glu Asp Gly Ala Leu Leu Gly Lys Ile Glu Lys 180 185 Val Arg Val Leu Arg Asn Asp Arg Arg Glu Gly Leu Met Arg Ser Arg 200 205 Val Arg Gly Ala Asp Ala Ala Gln Ala Lys Val Leu Thr Phe Leu Asp 220 215 Ser His Cys Glu Cys Asn Glu His Trp Leu Glu Pro Leu Leu Glu Arg

```
225
                 230
                                   235
Val Ala Glu Asp Arg Thr Arg Val Val Ser Pro Ile Ile Asp Val Ile
              245
                      250
Asn Met Asp Asn Phe Gln Tyr Val Gly Ala Ser Ala Asp Leu Lys Gly
                           265
Gly Phe Asp Trp Asn Leu Val Phe Lys Trp Asp Tyr Met Thr Pro Glu
                        280
Gln Arg Arg Ser Arg Gln Gly Asn Pro Val Ala Pro Ile Lys Thr Pro
                     295
Met Ile Ala Gly Gly Leu Phe Val Met Asp Lys Phe Tyr Phe Glu Glu
                                   315
Leu Gly Lys Tyr Asp Met Met Asp Val Trp Gly Gly Glu Asn Leu
             325
                               330
Glu Ile Ser Phe Arg Val Trp Gln Cys Gly Gly Ser Leu Glu Ile Ile
                            345
Pro Cys Ser Arg Val Gly His Val Phe Arg Lys Gln His Pro Tyr Thr
            360
Phe Pro Gly Gly Ser Gly Thr Val Phe Ala Arg Asn Thr Arg Arg Ala
                    375
                                      380
Ala Glu Val Trp Met Asp Glu Tyr Lys Asn Phe Tyr Tyr Ala Ala Val
                390
                      395
Pro Ser Ala Arg Asn Val Pro Tyr Gly Asn Ile Gln Ser Arg Leu Glu
             405
                               410
Leu Arg Lys Lys Leu Ser Cys Lys Pro Phe Lys Trp Tyr Leu Glu Asn
                            425
Val Tyr Pro Glu Leu Arg Val Pro Asp His Gln Asp Ile Ala Phe Gly
              440
Ala Leu Gln Gln Gly Thr Asn Cys Leu Asp Thr Leu Gly His Phe Ala
                    455
Asp Gly Val Val Gly Val Tyr Glu Cys His Asn Ala Gly Gly Asn Gln
                470
                                   475
Glu Trp Ala Leu Thr Lys Glu Lys Ser Val Lys His Met Asp Leu Cys
                               490 495
Leu Thr Val Val Asp Arg Ala Pro Gly Ser Leu Ile Lys Leu Gln Gly
    500 505 510
Cys Arg Glu Asn Asp Ser Arg Gln Lys Trp Glu Gln Ile Glu Gly Asn
      515 520 525
Ser Lys Leu Arg His Val Gly Ser Asn Leu Cys Leu Asp Ser Arg Thr
                    535
                                      540
Ala Lys Ser Gly Gly Leu Ser Val Glu Val Cys Gly Pro Ala Leu Ser
                  550
Gln Gln Trp Lys Phe Thr Leu Asn Leu Gln Gln *
```

<210> 1580

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1580

 Met Glu Arg Pro Leu Cys Ser His Leu Cys Ser Cys Leu Ala Met Leu

 1
 5
 10
 15

 Ala Leu Leu Ser Pro Leu Ser Leu Ala Gln Tyr Asp Ser Trp Pro His
 20
 25
 30

 Tyr Pro Glu Tyr Phe Gln Gln Pro Ala Pro Glu Tyr His Gln Pro Gln
 35
 40
 45

Ala Pro Ala Asn Val Ala Lys Ile Gln Leu Arg Leu Ala Gly Gln Lys
50
55
60
Arg Lys His Ser Glu Gly Pro Gly Gly Gly Val Leu *
65
70
75
76

<210> 1581 <211> 494 <212> PRT <213> Homo sapiens

<400> 1581 Met Gly Ser Leu Gln Pro Leu Ala Thr Leu Tyr Leu Leu Gly Met Leu 1 5 10 Val Ala Ser Cys Leu Gly Arg Leu Ser Trp Tyr Asp Pro Asp Phe Gln 25 Ala Arg Leu Thr Arg Ser Asn Ser Lys Cys Gln Gly Gln Leu Glu Val Tyr Leu Lys Asp Gly Trp His Met Val Cys Ser Gln Ser Trp Gly Arg 55 Ser Ser Lys Gln Trp Glu Asp Pro Ser Gln Ala Ser Lys Val Cys Gln 70 75 Arg Leu Asn Cys Gly Val Pro Leu Ser Leu Gly Pro Phe Leu Val Thr 85 90 Tyr Thr Pro Gln Ser Ser Ile Ile Cys Tyr Gly Gln Leu Gly Ser Phe 100 105 Ser Asn Cys Ser His Ser Arg Asn Asp Met Cys His Ser Leu Gly Leu 120 125 Thr Cys Leu Glu Pro Gln Lys Thr Thr Pro Pro Thr Thr Arg Pro Pro 135 140 Pro Thr Thr Pro Glu Pro Thr Ala Pro Pro Arg Leu Gln Leu Val 150 155 160 Ala Gln Ser Gly Gly Gln His Cys Ala Gly Val Val Glu Phe Tyr Ser 175 165 170 Gly Ser Leu Gly Gly Thr Ile Ser Tyr Glu Ala Gln Asp Lys Thr Gln 180 185 Asp Leu Glu Asn Phe Leu Cys Asn Asn Leu Gln Cys Gly Ser Phe Leu 195 200 Lys His Leu Pro Glu Thr Glu Ala Gly Arg Ala Gln Asp Pro Gly Glu 210 215 220 Pro Arg Glu His Gln Pro Leu Pro Ile Gln Trp Lys Ile Gln Asn Ser 230 235 Ser Cys Thr Ser Leu Glu His Cys Phe Arg Lys Ile Lys Pro Gln Lys 250 Ser Gly Arg Val Leu Ala Leu Leu Cys Ser Gly Phe Gln Pro Lys Val 265 Gln Ser Arg Leu Val Gly Gly Ser Ser Ile Cys Glu Gly Thr Val Glu 275 280 Val Arg Gln Gly Ala Gln Trp Ala Ala Leu Cys Asp Ser Ser Ser Ala 295 300 Arg Ser Ser Leu Arg Trp Glu Glu Val Cys Arg Glu Gln Gln Cys Gly 310 315 Ser Val Asn Ser Tyr Arg Val Leu Asp Ala Gly Asp Pro Thr Ser Arg 325 330 Gly Leu Phe Cys Pro His Gln Lys Leu Ser Gln Cys His Glu Leu Trp 345 Glu Arg Asn Ser Tyr Cys Lys Lys Val Phe Val Thr Cys Gln Asp Pro

360 355 Asn Pro Ala Gly Leu Ala Ala Gly Thr Val Ala Ser Ile Ile Leu Ala 370 375 380 Leu Val Leu Leu Val Val Leu Leu Val Val Cys Gly Pro Leu Ala Tyr 390 395 Lys Lys Leu Val Lys Lys Phe Arg Gln Lys Lys Gln Arg Gln Trp Ile 410 415 405 Gly Pro Thr Gly Met Asn Gln Asn Met Ser Phe His Arg Asn His Thr 425 Ala Thr Val Arg Ser His Ala Glu Asn Pro Thr Ala Ser His Val Asp 440 Asn Glu Tyr Ser Gln Pro Pro Arg Asn Ser Arg Leu Ser Ala Tyr Pro 455 Ala Leu Glu Gly Ala Leu His Arg Ser Ser Met Gln Pro Asp Asn Ser 470 475 Ser Asp Ser Asp Tyr Asp Leu His Gly Ala Gln Arg Leu * 485 490 493

<210> 1582 <211> 329 <212> PRT <213> Homo sapiens

<400> 1582

Met Gln Gly Leu Cys Ile Ser Val Ala Val Phe Leu His Tyr Phe Leu 10 Leu Val Ser Phe Thr Trp Met Gly Leu Glu Ala Phe His Met Tyr Leu 25 . Ala Leu Val Lys Val Phe Asn Thr Tyr Ile Arg Lys Tyr Ile Leu Lys Phe Cys Ile Val Gly Trp Gly Val Pro Ala Val Val Thr Ile Ile 55 Leu Thr Ile Ser Pro Asp Asn Tyr Gly Leu Gly Ser Tyr Gly Lys Phe 70 75 Pro Asn Gly Ser Pro Asp Asp Phe Cys Trp Ile Asn Asn Asn Ala Val 85 Phe Tyr Ile Thr Val Val Gly Tyr Phe Cys Val Ile Phe Leu Leu Asn 105 Val Ser Met Phe Ile Val Val Leu Val Gln Leu Cys Arg Ile Lys Lys 115 120 125 Lys Lys Gln Leu Gly Ala Gln Arg Lys Thr Ser Ile Gln Asp Leu Arg 140 130 135 Ser Ile Ala Gly Leu Thr Phe Leu Leu Gly Ile Thr Trp Gly Phe Ala 150 155 160 Phe Phe Ala Trp Gly Pro Val Asn Val Thr Phe Met Tyr Leu Phe Ala 170 Ile Phe Asn Thr Leu Gln Gly Phe Phe Ile Phe Ile Phe Tyr Cys Val 185 Ala Lys Glu Asn Val Arg Lys Gln Trp Arg Arg Tyr Leu Cys Cys Gly 200 Lys Leu Arg Leu Ala Glu Asn Ser Asp Trp Ser Lys Thr Ala Thr Asn 215 220 Gly Leu Lys Lys Gln Thr Val Asn Gln Gly Val Ser Ser Ser Ser Asn 225 230 235 240

Ser Leu Gln Ser Ser Ser Asn Ser Thr Asn Ser Thr Thr Leu Leu Val

<210> 1583 <211> 49 <212> PRT

<213> Homo sapiens

<210> 1584 <211> 671 <212> PRT <213> Homo sapiens

<400> 1584

Met Ile Ala Ser Cys Leu Cys Tyr Leu Leu Leu Pro Ala Thr Arg Leu 10 Phe Arg Ala Leu Ser Asp Ala Phe Phe Thr Cys Arg Lys Asn Val Leu Leu Ala Asn Ser Ser Pro Gln Val Glu Gly Asp Phe Ala Met Ala 40 Pro Arg Gly Pro Glu Gln Glu Glu Cys Glu Gly Leu Leu Gln Gln Trp 55 60 Arg Glu Glu Gly Leu Ser Gln Val Leu Ser Thr Ala Ser Glu Gly Pro 70 75 Leu Ile Asp Lys Gly Leu Ala Gln Ser Ser Leu Ala Leu Leu Met Asp 90 Asn Pro Gly Glu Glu Asn Ala Ala Ser Glu Asp Arg Trp Ser Ser Arg 100 105 Gln Leu Ser Asp Leu Arg Ala Ala Glu Asn Leu Asp Glu Pro Phe Pro 120 125 Glu Met Leu Gly Glu Glu Pro Leu Leu Glu Val Glu Gly Val Glu Gly 135 140 Ser Met Trp Ala Ala Ile Pro Met Gln Ser Glu Pro Gln Tyr Ala Asp 150 155 Cys Ala Ala Leu Pro Val Gly Ala Leu Ala Thr Glu Gln Trp Glu Glu

| | | | | 165 | | | | | 170 | | • | | | 175 | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asp | Pro | Ala | Val 180 | Leu | Ala | Trp | Ser | Ile 185 | Ala | Pro | Glu | Pro | Val 190 | | Gln |
| Glu | Glu | Ala 195 | Ser | Ile | Trp | Pro | Phe 200 | Glu | Gly | Leu | Gly | Gln 205 | Leu | Gln | Pro |
| Pro | Ala 210 | Val | Glu | Ile | Pro | Tyr 215 | His | Glu | Ile | Leu | Trp 220 | Arg | Glu | Trp | Glu |
| Asp 225 | Phe | Ser | Thr | Gln | Pro 230 | Asp | Ala | Gln | Gly | Leu 235 | Lys | Ala | Gly | Asp | Gly 240 |
| Pro | Gln | Phe | Gln | Phe 245 | Thr | Leu | Met | Ser | Tyr 250 | Asn | Ile | Leu | Ala | Gln 255 | Asp |
| Leu | Met | Gln | Gln 260 | Ser | Ser | Glu | Leu | Tyr 265 | Leu | His | Суѕ | His | Pro 270 | Asp | Ile |
| Leu | Asn | Trp 275 | Asn | Tyr | Arg | Phe | Val 280 | Asn | Leu | Met | Gln | Glu 285 | Phe | Gln | His |
| Trp | Asp 290 | Pro | Asp | Ile | Leu | Cys 295 | Leu | Gln | Glu | Val | Gln 300 | Glu | Asp | His | Tyr |
| 305 | | | Leu | | 310 | | | _ | | 315 | - | | | _ | 320 |
| | | | Arg | 325 | | | | | 330 | | | | | 335 | _ |
| | | | Arg 340 | | | | | 345 | | | | | 350 | | |
| | | 355 | Leu | | | | 360 | | | | | 365 | | | |
| | 370 | | Pro | | | 375 | | | | | 380 | | | | |
| 385 | | | Val | | 390 | | | | | 395 | | | | | 400 |
| | | | Leu - | 405 | | | | | 410 | | | | | 415 | |
| | | | Leu 420 | | | | | 425 | | | | | 430 | | _ |
| | | 435 | Ser | | | | 440 | | | | | 445 | | | |
| | 450 | | Gln | | | 455 | | | | | 460 | | | _ | |
| 465 | | | Ser | | 470 | | | | | 475 | | | | | 480 |
| | | | Ser | 485 | | | | | 490 | | | | | 495 | |
| | | | Lys 500 | | | | | 505 | | | | | 510 | | |
| | | 515 | Arg Glu | | | | 520 | | | | | 525 | | _ | |
| | 530 | | Ser | | | 535 | | | | | 540 | | | | _ |
| 545 | | | | | 550 | | | | | 555 | | | | | 560 |
| | | | Thr | 565 | | | | | 570 | | | | | 575 | |
| | | | His 580 | | | | | 585 | | | | | 590 | | |
| | | 595 | Gly | | | | 600 | | | | | 605 | | | |
| | 610 | | Glu | | _ | 615 | _ | | | | 620 | | _ | _ | - |
| 625 | TIIT | пеп | Lys | neu | 630 | атА | AT.Q. | nen | ser | ьеи 635 | ьeu | ser | GIU | GIU | 640 |

Leu Trp Ala Ala Asn Gly Leu Pro Asn Pro Phe Cys Ser Ser Asp His
645 650 655

Leu Cys Leu Leu Ala Ser Leu Gly Met Glu Val Thr Ala Pro *
660 665 670

<210> 1585 <211> 318 <212> PRT <213> Homo sapiens

<400> 1585 Met Met Cys Leu Lys Ile Leu Arg Ile Ser Leu Ala Ile Leu Ala Gly Trp Ala Leu Cys Ser Ala Asn Ser Glu Leu Gly Trp Thr Arg Lys Lys 20 25 Ser Leu Val Glu Arg Glu His Leu Asn Gln Val Leu Leu Glu Gly Glu 40 Arg Cys Trp Leu Gly Ala Lys Val Arg Arg Pro Arg Ala Ser Pro Gln 55 60 His His Leu Phe Gly Val Tyr Pro Ser Arg Ala Gly Asn Tyr Leu Arg 70 75 Pro Tyr Pro Val Gly Glu Gln Glu Ile His His Thr Gly Arg Ser Lys Pro Asp Thr Glu Gly Asn Ala Val Ser Leu Val Pro Pro Asp Leu Thr 105 Glu Asn Pro Ala Gly Leu Arg Gly Ala Val Glu Glu Pro Ala Ala Pro 120 Trp Val Gly Asp Ser Pro Ile Gly Gln Ser Glu Leu Leu Gly Asp Asp 135 140 Asp Ala Tyr Leu Gly Asn Gln Arg Ser Lys Glu Ser Leu Gly Glu Ala 150 155 Gly Ile Gln Lys Gly Ser Ala Met Ala Ala Thr Thr Thr Ala Ile 165 170 Phe Thr Thr Leu Asn Glu Pro Lys Pro Glu Thr Gln Arg Arg Gly Trp 180 185 190 Ala Lys Ser Arg Gln Arg Arg Gln Val Trp Lys Arg Arg Ala Glu Asp 200 205 Gly Gln Gly Asp Ser Gly Ile Ser Ser His Phe Gln Pro Trp Pro Lys 215 220 His Ser Leu Lys His Arg Val Lys Lys Ser Pro Pro Glu Glu Ser Asn 230 235 Gln Asn Gly Gly Glu Gly Ser Tyr Arg Glu Ala Glu Thr Phe Asn Ser 245 250 Gln Val Gly Leu Pro Ile Leu Tyr Phe Ser Gly Arg Arg Glu Arg Leu 265 Leu Leu Arg Pro Glu Val Leu Ala Glu Ile Pro Arg Glu Ala Phe Thr 280 Val Glu Ala Trp Val Lys Pro Glu Gly Gly Gln Asn Asn Pro Ala Ile 295 300 Ile Ala Gly Asn Thr Leu Leu Leu Gly Phe Leu Lys Ser *

<210> 1586 <211> 80

<212> PRT <213> Homo sapiens

<210> 1587 <211> 316 <212> PRT <213> Homo sapiens

<400> 1587 Met Phe Phe Gly Ser Ala Ala Leu Gly Thr Leu Thr Gly Leu Ile Ser 10 Ala Leu Val Leu Lys His Ile Asp Leu Arg Lys Thr Pro Ser Leu Glu Phe Gly Met Met Ile Ile Phe Ala Tyr Leu Pro Tyr Gly Leu Ala Glu 40 Gly Ile Ser Leu Ser Gly Ile Met Ala Ile Leu Phe Ser Gly Ile Val 55 Met Ser His Tyr Thr His His Asn Leu Ser Pro Val Thr Gln Ile Leu 70 75 Met Gln Gln Thr Leu Arg Thr Val Ala Phe Leu Cys Glu Thr Cys Val 85 Phe Ala Phe Leu Gly Leu Ser Ile Phe Ser Phe Pro His Lys Phe Glu 100 105 110 Ile Ser Phe Val Ile Trp Cys Ile Val Leu Val Leu Phe Gly Arg Ala 115 120 125 Val Asn Ile Phe Pro Leu Ser Tyr Leu Leu Asn Phe Phe Arg Asp His 140 135 Lys Ile Thr Pro Lys Met Met Phe Ile Met Trp Phe Ser Gly Leu Arg 145 150 155 160 Gly Ala Ile Pro Tyr Ala Leu Ser Leu His Leu Asp Leu Glu Pro Met 170 Glu Lys Arg Gln Leu Ile Gly Thr Thr Thr Ile Val Ile Val Leu Phe 180 185 Thr Ile Leu Leu Gly Gly Ser Thr Met Pro Leu Ile Arg Leu Met 200 Asp Ile Glu Asp Ala Lys Ala His Arg Arg Asn Lys Lys Asp Val Asn 215 220 Leu Ser Lys Thr Glu Lys Met Gly Asn Thr Val Glu Ser Glu His Leu 230 235 Ser Glu Leu Thr Glu Glu Glu Tyr Glu Ala His Tyr Ile Arg Arg Gln 250 Asp Leu Lys Gly Phe Val Trp Leu Asp Ala Lys Tyr Leu Asn Pro Phe 260 265

Phe Thr Arg Arg Leu Thr Gln Glu Asp Leu His His Gly Arg Ile Gln
275

Met Lys Thr Leu Thr Asn Lys Trp Tyr Glu Glu Val Arg Gln Gly Pro
290

Ser Gly Ser Glu Asp Asp Glu Gln Glu Leu Leu *
305

<210> 1588

<211> 53

<212> PRT

<213> Homo sapiens

<221> misc feature

<222> (1) . . . (53)

<223> Xaa = any amino acid or nothing

<400> 1588

<210> 1589

<211> 437

<212> PRT

<213> Homo sapiens

<400> 1589

Met Leu Lys Val Ser Ala Val Leu Cys Val Cys Ala Ala Ala Trp Cys 1 5 10 Ser Gln Ser Leu Ala Ala Ala Ala Ala Val Ala Ala Ala Gly Gly Arg 20 25 Ser Asp Gly Gly Asn Phe Leu Asp Asp Lys Gln Trp Leu Thr Thr Ile 40 Ser Gln Tyr Asp Lys Glu Val Gly Gln Trp Asn Lys Phe Arg Asp Glu 55 60 Val Glu Asp Asp Tyr Phe Arg Thr Trp Ser Pro Gly Lys Pro Phe Asp 75 . 80 70 Gln Ala Leu Asp Pro Ala Lys Asp Pro Cys Leu Lys Met Lys Cys Ser 90 Arg His Lys Val Cys Ile Ala Gln Asp Ser Gln Thr Ala Val Cys Ile 105 100 Ser His Arg Arg Leu Thr His Arg Met Lys Glu Ala Gly Val Asp His 120 125 Arg Gln Trp Arg Gly Pro Ile Leu Ser Thr Cys Lys Gln Cys Pro Val 135 140 Val Tyr Pro Ser Pro Val Cys Gly Ser Asp Gly His Thr Tyr Ser Phe 155 Gln Cys Lys Leu Glu Tyr Gln Ala Cys Val Leu Gly Lys Gln Ile Ser

```
170
Val Lys Cys Glu Gly His Cys Pro Cys Pro Ser Asp Lys Pro Thr Ser
                185
Thr Ser Arg Asn Val Lys Arg Ala Cys Ser Asp Leu Glu Phe Arg Glu
                       200
Val Ala Asn Arg Leu Arg Asp Trp Phe Lys Ala Leu His Glu Ser Gly
                   215
Ser Gln Asn Lys Lys Thr Lys Thr Leu Leu Arg Pro Glu Arg Ser Arg
225 230 235 240
Phe Asp Thr Ser Ile Leu Pro Ile Cys Lys Asp Ser Leu Gly Trp Met
             245 250
Phe Asn Arg Leu Asp Thr Asn Tyr Asp Leu Leu Leu Asp Gln Ser Glu
                         265 270
Leu Arg Ser Ile Tyr Leu Asp Lys Asn Glu Gln Cys Thr Lys Ala Phe
                      280 285
Phe Asn Ser Cys Asp Thr Tyr Lys Asp Ser Leu Ile Ser Asn Asn Glu
                   295
                           300
Trp Cys Tyr Cys Phe Gln Arg Gln Gln Asp Pro Pro Cys Gln Thr Glu
                                315
Leu Ser Asn Ile Gln Lys Arg Gln Gly Val Lys Lys Leu Leu Gly Gln
            325
                             330
Tyr Ile Pro Leu Cys Asp Glu Asp Gly Tyr Tyr Lys Pro Thr Gln Cys
         340
                         345 350
His Gly Ser Val Gly Gln Cys Trp Cys Val Asp Arg Tyr Gly Asn Glu
                                       365
                      360
Val Met Gly Ser Arg Ile Asn Gly Val Ala Asp Cys Ala Ile Asp Phe
                   375
                                    380
Glu Ile Ser Gly Asp Phe Ala Ser Gly Asp Phe His Glu Trp Thr Asp
                390
                                 395
Asp Glu Asp Asp Glu Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu
            405
                             410
Asp Asp Asp Glu Asp Glu Gly Asp Asp Asp Asp Gly Gly Asp Asp His
        420
                 425
Asp Val Tyr Ile *
      435 436
```

<210> 1590

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1590

<210> 1591

<211> 73

<212> PRT

<213> Homo sapiens

<210> 1592 <211> 62 <212> PRT <213> Homo sapiens

<400> 1592

<210> 1593 <211> 128 <212> PRT <213> Homo sapiens

<400> 1593

Met Arg Ala Met Leu Gly Thr Cys Ala Leu Gly Gln Phe Phe Leu Ile 10 Met Gly Asn Thr Gln Arg Cys Asp Asp Phe Pro Thr Glu Ser Pro Pro 25 Ala Lys Thr Asn Val Ser Arg Ala Gly Leu Ser Pro Pro Cys Glu Ala 40 45 Leu His Gly Val Glu Ser Arg Gly Ser Cys Ser His Gly Lys Leu Gln 55 Ser Pro Pro Gly Arg Asp Trp Pro Gln Gly Asp Pro Gln Asp Arg Pro 70 Lys Arg Arg Trp Gln Arg Pro Gly Pro Ala Gly Arg Gly Ala Pro Asp 85 90 Pro Thr Pro Lys Gly Gln Gly Ala Ala Val Pro Pro Arg Ser Ala Ser 100 105 Met Phe Leu Ile His Lys Gln Met Trp Ala Tyr Gly Phe Gly Asp * 120 125 127

<210> 1594 <211> 46 <212> PRT <213> Homo sapiens

<400> 1594

 Met Ile Trp Ala Leu Ser Ser Ser Leu Ile Pro Phe Leu Ile Ala Leu

 1
 5
 10
 15

 Cys Phe Val His Ser Ala Asn Ser His Leu Gln Val Leu Val Ile Cys
 20
 25
 30

 Ser Ser Leu Phe Leu Glu Pro Pro Pro Pro His Asn Phe Met
 *
 45

<210> 1595 <211> 86 <212> PRT <213> Homo sapiens

<400> 1595

 Met
 Trp
 Glu
 Leu
 Leu
 Arg
 Gly
 Leu
 Thr
 Ala
 Pro
 Ttp
 Leu
 Ser
 15

 Ser
 Trp
 Leu
 Cys
 Phe
 Ser
 Trp
 Arg
 Ala
 Ala
 Thr
 Val
 Ala
 Val
 Ala
 Val
 Ala
 Val
 Ala
 Ala

<210> 1596 <211> 69 <212> PRT <213> Homo sapiens

<210> 1597 <211> 56 <212> PRT <213> Homo sapiens

<400> 1597

<210> 1598 <211> 97 <212> PRT <213> Homo sapiens

<400> 1598

 Met
 His
 Glu
 Ser
 Pro
 Leu
 Ala
 Trp
 Ala
 Ser
 Val
 His
 Leu
 Ser
 Leu
 Leu
 15
 15
 15
 15
 15
 15
 15
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16</th

<210> 1599 <211> 113 <212> PRT <213> Homo sapiens

<400> 1599

 Met
 Thr
 Val
 Ser
 Gly
 Thr
 Val
 Val
 Leu
 Val
 Ala
 Gly
 Thr
 Leu
 Cys
 Phe

 1
 5
 5
 6
 10
 10
 10
 15
 15
 15

 Ala
 Trp
 Trp
 Ser
 Glu
 Gly
 Ala
 Thr
 Ala
 Gln
 Pro
 Gly
 Gln
 Leu
 Ala

 Pro
 Pro
 Thr
 Glu
 Trp
 Pro
 Val
 Pro
 Glu
 Gly
 Pro
 Ser
 Pro
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Ile
 Ile
 Fro
 Gly
 Pro
 Pro
 Pro
 Pro
 Pro
 Arg
 Trp

 Gly
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Ile
 Pro
 Gly
 Pro
 Gly
 Pro
 Pro
 Pro
 Pro
 Arg
 Trp

 Gly
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu

65 70 75 80

Asp Pro Tyr His Leu Ser Arg Asp Leu Tyr Tyr Leu Thr Val Glu Ser 85 90 95

Ser Glu Lys Glu Ser Cys Arg Thr Pro Lys Val Val Asp Ile Pro Asp 100 105 110 112

<210> 1600 <211> 103 <212> PRT <213> Homo sapiens

<400> 1600 Met Gly Ala Trp Ala Trp Val Pro Thr Pro Ser Leu Cys Leu Cys His 5 10 Ser Thr Cys Leu Glu Phe Leu Leu Phe Leu Tyr Ile Leu Phe Tyr Cys 20 25 Ile Phe Glu Thr Val Ser Leu Ser Pro Arg Leu Glu Arg Ser Gly Ala 40 Ile Leu Ala Arg Cys Asn Leu Cys Leu Arg Gly Ser Ser Asp Ser Arg 55 60 Ala Leu Ala Ser Arg Val Ala Glu Thr Thr Gly Met His His Ala 70 75 Trp Leu Ile Phe Ala Phe Leu Val Glu Thr Gly Phe His His Val Gly 85 90 Gln Ala Gly Leu Asn Ser * 100 102

<210> 1601 <211> 84 <212> PRT <213> Homo sapiens

<210> 1602 <211> 91 <212> PRT

<213> Homo sapiens

<210> 1603 <211> 69 <212> PRT

<213> Homo sapiens

<210> 1604 <211> 83 <212> PRT <213> Homo sapiens

(213) Home Baptens

<210> 1605

```
<211> 110
    <212> PRT
    <213> Homo sapiens
    <221> misc feature
    <222> (1) ... (110)
    <223> Xaa = any amino acid or nothing
    <400> 1605
Met Ser Thr Ile Ile Phe Gln Trp Pro Phe Met Leu Val Ser Leu His
                                   10
Arg Cys Arg Lys Leu Pro Arg Ala Leu Lys Asp Trp Gln Ala Phe Leu
           20
                              25
Asp Leu Lys Lys Ile Ile Asp Asp Phe Ser Glu Cys Cys Pro Leu Leu
                          40
                                             45
Glu Tyr Met Gly Ser Lys Ala Met Met Glu Arg His Xaa Glu Arg Ile
                       55
                                         60
Thr Thr Leu Thr Gly His Ser Leu Asp Val Gly Asn Glu Ser Phe Lys
                    70
                                      75
Leu Arg Asn Ile Met Glu Ala Pro Leu Leu Xaa Tyr Lys Glu Glu Ile
Glu Val Glu Tyr Asp Val Met Glu Asp Cys Lys Val Ser Trp
           100
                    105
   · <210> 1606
    <211> 72
    <212> PRT
    <213> Homo sapiens
    <400> 1606
Met Thr Ala Gly Thr Val Thr Met Leu Leu Trp His Ala Ser Asn Trp
                   10
1 5
Asp Val Gln Leu Pro Ser Gln Pro Leu Val Glu Leu Thr Pro Val Arg
                               25
Asp Leu Asp Thr Ser Gly Leu Thr Ala Phe Leu Ala Arg Asp Met Asn
                           40
Leu Leu Ser Gly Asn Val Asn Thr Met Asn Gly Glu Ser Ile Ile Ala
Ile Thr Met Lys Met Leu Ala *
                    70 71
    <210> 1607
    <211> 59
    <212> PRT
    <213> Homo sapiens
    <400> 1607
Met Phe Thr Arg Phe Ile Gly Leu Phe Leu Lys Phe Ile Leu Met Phe
```

<210> 1608 <211> 118 <212> PRT <213> Homo sapiens

<400> 1608

Met Leu Val Thr Asp Thr Glu Ala Phe Trp Gln Pro Gln Pro Trp Phe Val Val Leu Thr Ala Thr Gly Ala Leu Leu Leu Leu Ala Leu Gly 20 25 Trp Leu Leu Gly Arg Leu Leu Gln Gly Leu Ala Gln Leu Leu Gln Ala 40 Pro Ser Lys Pro Ala Gln Ala Leu Leu Leu Asn Ser Ile Gln Gly Thr 55 60 Glu Gly Ser Ile Glu Gly Phe Leu Glu Ala Pro Lys Met Glu Met Ser Gln Ala Pro Ser Ser Val Met Ser Leu Gln His Phe Asp Gly Arg Thr 90 Gln Asp Ser Arg Thr Gly Arg Asp Tyr Leu Val Asn Thr His Thr Gly 100 105 Ala Arg Arg Trp Leu * 115 117

<210> 1609 <211> 50 <212> PRT <213> Homo sapiens

<400> 1609

<210> 1610 <211> 50 <212> PRT <213> Homo sapiens

<400> 1610 Met Val Leu Ile Leu Ser Pro Gly Leu Ser Ile Leu Phe Thr Lys Met 1 5 10 Ser Glu Thr Phe Ser Ser Ser Leu Leu Lys Leu Ser Ser Ser Ile Cys 20 25 Ile Phe Pro Leu Cys Ile Asn Met Ile Ile Cys Tyr Gln Lys Lys Ser 40 Gln * 49 <210> 1611 <211> 56

<212> PRT <213> Homo sapiens

<400> 1611 Met Ser Phe Gln Ala Phe Val Phe Leu Met Ile Gly Trp Leu His Pro 10 Asp Pro Arg Leu Met Thr Gln Arg Ser Cys Gly Pro His Pro Glu Val 20 25 Asp Ser Ala Gln Glu Asp His Phe Ser His Pro Tyr Asp Ile Pro Asn 40 Gln Ser Ala Pro Pro Leu Pro * 50

<210> 1612 <211> 75 <212> PRT <213> Homo sapiens

<400> 1612 Met Leu Thr Leu Ala Leu Leu Val Leu Arg Ile Cys Val Cys Glu Ala 1 5 10 15 Ala Ser Thr Phe Val Cys Pro Cys Leu Pro Trp Leu Ser Leu Leu Phe 25 Leu His Leu Leu Pro Arg Leu Phe Gln Val Gln Ile Trp Phe Leu Leu Phe Leu Pro Phe Leu Leu Leu Pro Ser Val Pro Glu Ile Phe Pro 50 55 Ala Pro Gln Ala Trp Gly Leu Gly Cys Ser * 70

<210> 1613 <211> 192 <212> PRT <213> Homo sapiens

<400> 1613 Met Phe Thr Cys Leu Phe Leu Phe Ser Ala Val Leu Arg Ala Leu Phe

Arg Lys Ser Asp Pro Lys Arg Phe Gln Asn Ile Phe Thr Thr Ile Phe 20 Thr Leu Phe Thr Leu Leu Thr Leu Asp Asp Trp Ser Leu Ile Tyr Met 40 Asp Ser Arg Ala Gln Gly Ala Trp Tyr Ile Ile Pro Ile Leu Ile Ile Tyr Ile Ile Ile Gln Tyr Phe Ile Phe Leu Asn Leu Val Ile Thr Val 65 70 75 80 Leu Val Asp Ser Phe Gln Thr Ala Leu Phe Lys Gly Leu Glu Lys Ala 85 Lys Gln Glu Arg Ala Ala Arg Ile Gln Glu Lys Leu Leu Glu Asp Ser 100 105 Leu Thr Glu Leu Arg Ala Ala Glu Pro Lys Glu Val Ala Ser Glu Gly 120 Thr Met Leu Lys Arg Leu Ile Glu Lys Lys Phe Gly Thr Met Thr Glu 135 140 Lys Gln Gln Glu Leu Leu Phe His Tyr Leu Gln Leu Val Ala Ser Val 150 155 Glu Gln Glu Gln Lys Phe Arg Ser Gln Ala Ala Val Ile Asp Glu 170 Ile Val Asp Thr Thr Phe Glu Ala Gly Glu Glu Asp Phe Arg Asn * 185

<210> 1614 <211> 153 <212> PRT

<213> Homo sapiens

<400> 1614 Met Asp Leu Val Gln Phe Phe Val Thr Phe Phe Ser Cys Phe Leu Ser 10 Leu Leu Leu Val Ala Ala Val Val Trp Lys Ile Lys Gln Thr Cys Trp 25 Ala Ser Arg Arg Glu Gln Leu Leu Arg Glu Arg Gln Gln Met Ala Ser Arg Pro Phe Ala Ser Val Asp Val Ala Leu Glu Val Gly Ala Glu 55 Gln Thr Glu Phe Leu Arg Gly Pro Leu Glu Gly Ala Pro Lys Pro Ile 70 75 Ala Ile Glu Pro Cys Ala Gly Asn Arg Ala Ala Val Leu Thr Val Phe 90 85 Leu Cys Leu Pro Arg Gly Ser Ser Gly Ala Pro Pro Pro Gly Gln Ser 105 Gly Leu Ala Ile Ala Ser Ala Leu Ile Asp Ile Ser Gln Gln Lys Ala 120 Ser Asp Ser Lys Asp Lys Thr Ser Gly Val Arg Asn Arg Lys His Leu 135 Ser Thr Arg Gln Gly Thr Cys Val * 150 152

<210> 1615

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1615 Met His Trp Leu Arg Ala Ser Ala Gly Ser Leu Leu Met Val Pro Leu 10 Met Thr Asp Leu His Glu Leu Ala Leu Pro Pro Ala Ser Leu Arg Thr 25 Val Val Lys Glu Asn Met Cys Val Leu Pro Phe Pro Val Lys Thr Ser 40 Gly Arg Ser Leu Thr Gly Ser Ala Trp Ser Arg Phe His Leu Pro Cys His Leu Arg Pro Gly Asp Arg Leu Pro Cys His Cys Leu Gly Lys Phe 70 Arg Lys Arg Val Ala Lys Trp Cys Ile Arg Lys Asn Met Ala Arg Ser 85 90 Pro His Leu Leu Gly Gly Arg Pro Asn Ser Thr Ser Gly Pro Leu Cys 100 105 110 Asp Phe Pro Ala Pro Ser Lys Gln Val Thr Pro Leu Leu Trp Val Ser 115 120 Val Ser Leu Pro Ile Lys * 130 134

<210> 1616 <211> 60 <212> PRT

<213> Homo sapiens

<400> 1616

Cys Lys Ile Leu Leu Tyr Phe Ile Val Asn Phe *
50 55 59

<210> 1617 <211> 49 <212> PRT <213> Homo sapiens

<210> 1618 <211> 95 <212> PRT <213> Homo sapiens

<210> 1619 <211> 54 <212> PRT <213> Homo sapiens

<210> 1620 <211> 71 <212> PRT <213> Homo sapiens

50 53

<400> 1620

 Met
 Cys
 Cys
 Ser
 Phe
 Leu
 Leu
 Glu
 Glu
 Leu
 Leu
 Leu
 Leu
 Leu
 Phe
 Leu
 Phe
 Ser
 Leu
 Leu
 Phe
 Phe
 Leu
 Try
 Ile
 Val
 Leu
 Phe
 Phe
 Leu
 Try
 Ile
 Val
 Asn
 Asp
 Thr
 Phe
 Ala
 Lys
 Thr
 Lys
 Asn
 Asn
 Asp
 Thr
 Phe
 Ala
 Lys
 Thr
 Lys
 Asn
 Asp
 Thr
 Phe
 Ala
 Lys
 Thr
 Lys
 Asn
 Asn
 Asp
 Ile
 Pro
 Asp
 Leu
 Pro
 Ser
 Leu
 Pro
 Ser
 Leu
 Pro
 Pro
 Pro
 Ser
 Leu
 Thr
 Pro
 Pro</th

```
<210> 1621
    <211> 90
    <212> PRT
    <213> Homo sapiens
    <221> misc_feature
    <222> (1)...(90)
    <223> Xaa = any amino acid or nothing
    <400> 1621
Met Asp His Lys Ser Leu Trp Ala Gly Val Glu Val Leu Leu Leu
Gln Gly Gly Ser Ala Tyr Lys Leu Val Cys Tyr Phe Thr Asn Trp Ser
                            25
Gln Asp Arg Gln Glu Pro Gly Lys Phe Thr Pro Glu Asn Ile Asp Pro
                         40
Phe Leu Cys Ser His Leu Ile Tyr Ser Phe Ala Ser Ile Glu Asn Asn
                     55
                            60
Lys Val Ile Ile Arg Thr Pro Xaa Phe Phe Pro Leu Pro Leu Gly His
             70 ·
                                   75
Arg Leu Gln Thr Ile Asn Pro Arg Leu *
              85
    <210> 1622
    <211> 53
    <212> PRT
    <213> Homo sapiens
    <400> 1622
Met Gln Cys Ala Ile Cys Ile Leu Leu Tyr Leu Leu Asn Lys Lys Thr
                   10 15
Val Trp Arg Cys Ser Arg Ile His His Asn Asn Thr Val Val Leu Thr
       20
                            25
Arg Glu Ser Ser Pro Phe Leu Thr Thr Cys Thr Leu Ser Ser Val Leu
                     40
       35
Leu Thr Lys Ala *
    50 52
    <210> 1623
    <211> 978
    <212> PRT
    <213> Homo sapiens
    <400> 1623
Met Pro Ala Arg Arg Leu Leu Leu Leu Thr Leu Leu Pro Gly
1 5
                               10
Leu Gly Ile Phe Gly Ser Thr Ser Thr Val Thr Leu Pro Glu Thr Leu
          20
                       25
Leu Phe Val Ser Thr Leu Asp Gly Ser Leu His Ala Val Ser Lys Arg
```

40

35

Thr Gly Ser Ile Lys Trp Thr Leu Lys Glu Asp Pro Val Leu Gln Val 55 Pro Thr His Val Glu Glu Pro Ala Phe Leu Pro Asp Pro Asn Asp Gly 70 75 Ser Leu Tyr Thr Leu Gly Ser Lys Asn Asn Glu Gly Leu Thr Lys Leu Pro Phe Thr Ile Pro Glu Leu Val Gln Ala Ser Pro Cys Arg Ser Ser 105 Asp Gly Ile Leu Tyr Met Gly Lys Lys Gln Asp Ile Trp Tyr Val Ile 120 Asp Leu Leu Thr Gly Glu Lys Gln Gln Thr Leu Ser Ser Ala Phe Ala 135 Asp Ser Leu Cys Pro Ser Thr Ser Leu Leu Tyr Leu Gly Arg Thr Glu 150 155 Tyr Thr Ile Thr Met Tyr Asp Thr Lys Thr Arg Glu Leu Arg Trp Asn 165 170 Ala Thr Tyr Phe Asp Tyr Ala Ala Ser Leu Pro Glu Asp Asp Val Asp 180 185 Tyr Lys Met Ser His Phe Val Ser Asn Gly Asp Gly Leu Val Val Thr 200 Val Asp Ser Glu Ser Gly Asp Val Leu Trp Ile Gln Asn Tyr Ala Ser 215 220 Pro Val Val Ala Phe Tyr Val Trp Gln Arg Glu Gly Leu Arg Lys Val -230 235 Met His Ile Asn Val Ala Val Glu Thr Leu Arg Tyr Leu Thr Phe Met 245 250 Ser Gly Glu Val Gly Arg Ile Thr Lys Trp Lys Tyr Pro Phe Pro Lys 260 . 265 Glu Thr Glu Ala Lys Ser Lys Leu Thr Pro Thr Leu Tyr Val Gly Lys 280 Tyr Ser Thr Ser Leu Tyr Ala Ser Pro Ser Met Val His Glu Gly Val 295 Ala Val Val Pro Arg Gly Ser Thr Leu Pro Leu Leu Glu Gly Pro Gln 310 315 Thr Asp Gly Val Thr Ile Gly Asp Lys Gly Glu Cys Val Ile Thr Pro 325 330 335 Ser Thr Asp Val Lys Phe Asp Pro Gly Leu Lys Ser Lys Asn Lys Leu 345 Asn Tyr Leu Arg Asn Tyr Trp Leu Leu Ile Gly His His Glu Thr Pro 360 Leu Ser Ala Ser Thr Lys Met Leu Glu Arg Phe Pro Asn Asn Leu Pro 375 380 Lys His Arg Glu Asn Val Ile Pro Ala Asp Ser Glu Lys Lys Ser Phe 390 395 Glu Glu Val Ile Asn Leu Val Asp Gln Thr Ser Glu Asn Ala Pro Thr 410 Thr Val Ser Arg Asp Val Glu Glu Lys Pro Ala His Ala Pro Ala Arg 425 Pro Glu Ala Pro Val Asp Ser Met Leu Lys Asp Met Ala Thr Ile Ile 440 Leu Ser Thr Phe Leu Leu Ile Gly Trp Val Ala Phe Ile Ile Thr Tyr 455 460 Pro Leu Ser Met His Gln Gln Gln Gln Leu Gln His Gln Gln Phe Gln 470 475 Lys Glu Leu Glu Lys Ile Gln Leu Leu Gln Gln Gln Gln Gln Leu 485 490 Pro Phe His Pro Pro Gly Asp Thr Ala Gln Asp Gly Glu Leu Leu Asp 505 Thr Ser Gly Pro Tyr Ser Glu Ser Ser Gly Thr Ser Ser Pro Ser Thr

| | | 515 | | | | | 520 | | | | | 525 | | | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ser | Pro | | Ala | Ser | Asn | His | | Leu | Cvs | Ser | Glv | | Ser | Ala | Ser |
| | 530 | | | | | 535 | | | -1- | | 540 | | | | |
| Lys 545 | Ala | Gly | Ser | Ser | Pro 550 | Ser | Leu | Glu | Gln | Asp 555 | Asp | Gly | Asp | Glu | Glu 560 |
| | Ser | Val | Val | Ile 565 | | Gly | Lys | Ile | Ser 570 | | Суз | Pro | Lys | Asp 575 | |
| Leu | Gly | His | Gly 580 | | Glu | Gly | Thr | Ile 585 | - | Tyr | Arg | Gly | Met 590 | _ | Asp |
| Asn | Arg | Asp 595 | Val | Ala | Val | Lys | Arg 600 | | Leu | Pro | Glu | | | Ser | Phe |
| Ala | Asp 610 | | Glu | Val | Gln | | | Arg | Glu | Ser | _ | 605 Glu | His | Pro | Asn |
| Val 625 | | Arg | Tyr | Phe | Суs 630 | 615 Thr | Glu | Lys | Asp | - | 620 Gln | Phe | Gln | Tyr | |
| | Ile | Glu | Leu | | | Ala | Thr | Leu | | | Tyr | Val | Glu | | 640 Lys |
| Asp | Phe | Ala | His | 645 Leu | Gly | Leu | Glu | | 650 Ile | Thr | Leu | Leu | | 655 Gln | Thr |
| Thr | Ser | | 660 Leu | Ala | His | Leu | | 665 Ser | Leu | Asn | Ile | | 670 His | Arg | Asp |
| Leu | - | 675 Pro | His | Asn | Ile | | 680 Ile | Ser | Met | Pro | | 685 Ala | His | Gly | Lys |
| | 690 Lys | Ala | Met | Ile | | 695 Asp | Phe | Gly | Leu | | 700 Lys | Lys | Leu | Ala | Val |
| 705 Gly | Arg | His | Ser | | 710 Ser | Arg | Arg | Ser | | 715 Val | Pro | Gly | Thr | Glu | 720 Gly |
| Trp | Ile | Ala | Pro | 725 Glu | Met | Leu | Ser | | 730 Asp | Cys | Lys | Glu | Asn | 735 Pro | Thr |
| Tyr | Thr | Val | 740 Asp | Ile | Phe | Ser | Ala | 745 Gly | Cys | Val | Phe | Tyr | 750 Tyr | Val | Ile |
| Ser | Glu | 755 Gly | Ser | His | Pro | Phe | 760 Gly | Lys | Ser | Leu | Gln | 765 Arg | | Ala | Asn |
| Ile | 770 Leu | Leu | Gly | Ala | Суз | 775 Ser | Leu | Asp | Cys | Leu | 780 His | Pro | Glu | Lys | His |
| 785 Glu | Asp | Val | Ile | Ala | 790 Arg | Glu | Leu | Ile | Glu | 795 Lys | Met | Ile | Ala | Met | 800 Asp |
| | | | Arg | 805 | | | | | 810 | | | | | 815 | _ |
| | | | 820 Glu | | | | | 825 | | | | | 830 | | |
| | | 835 | Glu | | | | 840 | | | | | 845 | | | |
| | 850 | - | Ala | | | 855 | _ | | | | 860 | | | | • |
| 865 | | | Thr | | 870 | | | | | 875 | | | | | 880 |
| | | | Leu | 885 | | | - | | 890 | | - | _ | _ | 895 | |
| | | _ | 900 | | Ī | | | 905 | | - | - | | 910 | • | |
| | | 915 | Ala | | | | 920 | | | _ | | 925 | | | |
| | 930 | _ | Tyr | | | 935 | _ | | | | 940 | | | | |
| Tyr 945 | Arg | Ala | Met | Glu | Leu 950 | Cys | Ser | His | Glu | Arg 955 | Leu | Phe | Gln | Pro | Tyr 960 |
| Tyr | Phe | His | Glu | Pro 965 | Pro | Glu | Pro | Gln | Pro 970 | Pro | Val | Thr | Pro | Asp 975 | Ala |
| Leu 977 | * | | | | | | | | | | | | | | |

915

<210> 1624 <211> 56 <212> PRT <213> Homo sapiens

<210> 1625 <211> 146 <212> PRT <213> Homo sapiens

<400> 1625 Met Glu Leu Ala Leu Cys Gly Leu Val Val Met Ala Gly Val Ile 10 Pro Ile Gln Gly Gly Ile Leu Asn Leu Asn Lys Met Val Lys Gln Val 20 25 Thr Gly Lys Met Pro Ile Leu Ser Tyr Trp Pro Tyr Gly Cys His Cys 35 40 Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala Thr Asp Trp Cys Cys 55 60 Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys Thr Gln Gly Cys Gly 70 75 Ile Tyr Lys Asp Tyr Tyr Arg Tyr Asn Phe Ser Gln Gly Asn Ile His 85 90 Cys Ser Asp Lys Gly Ser Trp Cys Glu Gln Gln Leu Cys Ala Cys Asp 100 105 Lys Glu Val Ala Phe Cys Leu Lys Arg Asn Leu Asp Thr Tyr Gln Lys 120 125 Arg Leu Arg Phe Tyr Trp Arg Pro His Cys Arg Gly Gln Thr Pro Gly 130 135 Cys *

<210> 1626 <211> 385 <212> PRT <213> Homo sapiens

145

 $<\!\!400\!\!> 1626$. Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly

```
10
Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln
          20
                 25
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
               40
Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
             55
Glu Trp Val Ser Gly Ile Gly Gly Ser Gly Ser Ser Thr Tyr Tyr Ala
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Gln Asn
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
         100
                           105
Tyr Tyr Cys Ala Lys Ser His Pro Ala Tyr Tyr Tyr Gly Ser Gly Ser
                       120
                                         125
Tyr Ser Ser His Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln
                   135
                                     140
Gly Thr Thr Val Thr Val Ser Ser Gly Asp Gly Ser Ser Gly Gly Ser
145 150
                                 155
Gly Gly Ala Ser Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr
                             170 175
Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser
                          185
Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly
                       200
Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly
                   215 ' 220
Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
         230
                                 235
Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln
             245
                              250
Gln Tyr Gly Ser Ser Pro Thr Thr Phe Gly Gln Gly Thr Lys Val Glu
                           265
Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
             280
                               285
Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
  290 295
                                     300
Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
             310
                                 315
Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
                             330
Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
   340 345 350
Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Ser Gly Ala
             360
Leu Ser Phe Ala Arg Ser Gln Arg Ser Phe Gln Pro Gly Glu Ser Val
```

<210> 1627

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1627

<210> 1628 <211> 71 <212> PRT <213> Homo sapiens

<210> 1629 <211> 112 <212> PRT <213> Homo sapiens

<400> 1629 Met Ala His Tyr Lys Thr Glu Gln Asp Asp Trp Leu Ile Ile Tyr Leu Lys Tyr Leu Leu Phe Val Phe Asn Phe Phe Phe Trp Val Gly Gly Ala 25 Ala Val Leu Ala Val Gly Ile Trp Thr Leu Val Glu Lys Ser Gly Tyr 40 Leu Ser Val Leu Ala Ser Ser Thr Phe Ala Ala Ser Ala Tyr Ile Leu 55 60 Ile Phe Ala Gly Val Leu Val Met Val Thr Gly Phe Leu Gly Phe Gly 70 75 Ala Ile Leu Trp Glu Arg Lys Gly Cys Leu Ser Thr Tyr Phe Cys Leu 90 Leu Leu Val Ile Phe Leu Asp Glu Leu Glu Ala Gly Val Leu Ala His 100 105

<210> 1630 <211> 47 <212> PRT <213> Homo sapiens

<400> 1630

<210> 1631 <211> 79 <212> PRT <213> Homo sapiens

<400> 1631

 Met
 Tyr
 Met
 Trp
 Ser
 Gly
 Leu
 Leu
 Gly
 Ser
 Lys
 Tyr
 Thr
 Leu
 Val
 Tyr

 Ser
 His
 Phe
 Leu
 Asn
 Met
 Ala
 Pro
 Ala
 Ser
 Phe
 Ser
 His
 Tyr
 Gln
 Ala

 Ser
 Leu
 Pro
 Leu
 Glu
 His
 Asp
 Thr
 Leu
 Ser
 Ser
 Arg
 Val
 His

 Ser
 Tyr
 Gln
 Cys
 Pro
 Gly
 Phe
 Phe

<210> 1632 <211> 48 <212> PRT <213> Homo sapiens

<210> 1633 <211> 58 <212> PRT

<213> Homo sapiens

Gln Gly His Pro Lys Ala Ala Asn Pro *
50 55 57

<210> 1634 <211> 55 <212> PRT

<213> Homo sapiens

<210> 1635 <211> 78 <212> PRT <213> Homo sapiens

<400> 1635

<210> 1636 <211> 51 <212> PRT <213> Homo sapiens

<210> 1637 <211> 123 <212> PRT <213> Homo sapiens

<400> 1637 Met Gln Gln Met Met Trp Ala Gly Leu Leu Cys Pro Gln Leu Glu Trp ·1 5 10 Leu Gln Gly Arg Ala Cys Arg Pro Cys Gly Leu Leu Ala Ser Asp Ala 25 Ala Ala Leu Trp Phe Arg Gly Gly Ile Ser Ala Trp Glu Asp Ser Cys 40 Ala Val Ser Asn Ile Arg His Glu Ala Tyr Asn Cys His Leu Ser Val 60 Phe Leu Asn Arg Cys Ala Asn Glu Leu Thr Val Gln Phe Leu Ile Ile 70 Leu Ala Phe Gln Ile Met Leu Ser Cys Ala Val Ile Ala Pro Ala Val 85 90 Pro Val Phe Gln Arg Leu Thr Leu Lys Arg Ser Gly Arg Thr Ser Leu 100 105 Gly Ser Thr Gly Arg Leu His Phe Cys Lys *

120

<210> 1638 <211> 69 <212> PRT <213> Homo sapiens

<210> 1639

<211> 92 <212> PRT <213> Homo sapiens

<210> 1640 <211> 58 <212> PRT <213> Homo sapiens

85

<210> 1641 <211> 459 <212> PRT <213> Homo sapiens

```
105
         100
Arg Ile Val Gln Leu Ile Gln Asp Thr Arg Ile His Ile Leu Pro Ser
      115 120
Met Asn Pro Asp Gly Tyr Glu Val Ala Ala Ala Gln Gly Pro Asn Lys
                  135
                                   140
Pro Gly Tyr Leu Val Gly Arg Asn Asn Ala Asn Gly Val Asp Leu Asn
       150
                               155
Arg Asn Phe Pro Asp Leu Asn Thr Tyr Ile Tyr Tyr Asn Glu Lys Tyr
           165
                            170 175
Gly Gly Pro Asn His His Leu Pro Leu Pro Asp Asn Trp Lys Ser Gln
         180 185 190
Val Glu Pro Glu Thr Arg Ala Val Ile Arg Trp Met His Ser Phe Asn
                     200 . 205
Phe Val Leu Ser Ala Asn Leu His Gly Gly Ala Val Val Ala Asn Tyr
                  215
                                   220
Pro Tyr Asp Lys Ser Phe Glu His Arg Val Arg Gly Val Arg Arg Thr
               230 235
Ala Ser Thr Pro Thr Pro Asp Asp Lys Leu Phe Gln Lys Leu Ala Lys
            245
                            250
Val Tyr Ser Tyr Ala His Gly Trp Met Phe Gln Gly Trp Asn Cys Gly
        260
                         265
Asp Tyr Phe Pro Asp Gly Ile Thr Asn Gly Ala Ser Trp Tyr Ser Leu
     275 280 285
Ser Lys Gly Met Gln Asp Phe Asn Tyr Leu His Thr Asn Cys Phe Glu
                   295
                                  300
Ile Thr Leu Glu Leu Ser Cys Asp Lys Phe Pro Pro Glu Glu Glu Leu
               310
                                315
Gln Arg Glu Trp Leu Gly Asn Arg Glu Ala Leu Ile Gln Phe Leu Glu
            325
                   330
Gln Val His Gln Gly Ile Lys Gly Met Val Leu Asp Glu Asn Tyr Asn
         340
                         345
Asn Leu Ala Asn Ala Val Ile Ser Val Ser Gly Ile Asn His Asp Val
                      360
Thr Ser Gly Asp His Gly Asp Tyr Phe Arg Leu Leu Pro Gly Ile
        375
                           380
Tyr Thr Val Ser Ala Thr Ala Pro Gly Tyr Asp Pro Glu Thr Val Thr
        390 395
Val Thr Val Gly Pro Ala Glu Pro Thr Leu Val Asn Phe His Leu Lys
            405 410 415
Arg Ser Ile Pro Gln Val Ser Pro Val Arg Arg Ala Pro Ser Arg Arg
         420 425
His Gly Val Arg Ala Lys Val Gln Pro Gln Pro Arg Lys Lys Glu Met
                      440
Glu Met Arg Gln Leu Gln Arg Gly Pro Ala *
                   455 458
```

<210> 1642

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1642

Met Ala Arg Cys Thr Leu Thr Leu Leu Lys Thr Met Leu Thr Glu Leu 1 5 10 15

Leu Arg Gly Gly Ser Phe Glu Phe Lys Asp Met Arg Val Pro Ser Ala 20 25 30

Leu Val Thr Leu His Met Leu Leu Cys Ser Ile Pro Leu Ser Gly Arg Leu Asp Ser Asp Glu Gln Lys Ile Gln Asn Asp Ile Ile Asp Ile Leu 55 Leu Thr Phe Thr Gln Gly Val Asn Glu Lys Leu Thr Ile Ser Glu Glu 70 75 Thr Leu Ala Asn Asn Thr Trp Ser Leu Met Leu Lys Glu Val Leu Ser 90 Ser Ile Leu Lys Val Pro Glu Gly Phe Phe Ser Gly Leu Ile Leu Leu 105 110 Ser Glu Leu Pro Leu Pro Leu Pro Met Gln Thr Thr Gln Val Ser 115 120 125 Leu Pro Tyr Asn Met His Leu Ile Asn Asp Cys Ser Asn Thr Phe * 135 140 143

<210> 1643 <211> 70 <212> PRT

<213> Homo sapiens

<210> 1644 <211> 82 <212> PRT

<213> Homo sapiens

<400> 1644

Met Gly Met Gly Thr Leu Ile Ile Met Asn Val Trp Val Leu Phe Ile 10 Pro Thr Arg Leu Arg Ile Asp Gln Gln Pro Val His Ile Lys Pro Ser 25 · Met Arg Val Leu Asp Lys Trp Val Ser Ala Phe Val His Lys Gly Phe 35 40 Thr Trp Gly Thr Ser Glu Arg Ile Asn Thr Gly Ser Ser Ser Asp Ile 55 60 Thr Leu Gly Ile Leu Asn Lys Cys Gly Trp Ala Val Phe Cys Ala Ala 65 70 75 Pro * 81

<210> 1645 <211> 256 <212> PRT <213> Homo sapiens

<400> 1645 Met Ala Ala Leu Thr Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala 5 10 Leu Ala Gly Asp Thr Gln Pro Arg Phe Leu Trp Gln Gly Lys Tyr Lys 20 25 Cys His Phe Phe Asn Gly Thr Glu Arg Val Gln Phe Leu Glu Arg Leu 40 Phe Tyr Asn Gln Glu Glu Phe Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr Glu Leu Gly Arg Pro Val Ala Glu Ser Trp Asn 70 · Ser Gln Lys Asp Ile Leu Glu Asp Arg Arg Gly Gln Val Asp Thr Val 85 90 Cys Arg His Asn Tyr Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg 100 105 Val His Pro Glu Val Thr Val Tyr Pro Ala Lys Thr Gln Pro Leu Gln 120 125 His His Asn Leu Leu Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser 135 140 Ile Glu Val Arg Trp Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val 150 155 Val Ser Thr Gly Leu Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu 165 170 Val Met Leu Glu Thr Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln 180 185 190 Val Glu His Pro Ser Val Met Ser Pro Leu Thr Val Glu Trp Arg Ala 200 Arg Ser Glu Ser Ala Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe 220 215 Val Leu Gly Leu Leu Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg 230 235 Asn Gln Lys Gly His Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser * 250

<210> 1646 <211> 263 <212> PRT <213> Homo sapiens

Asp Asp Gly Arg Arg Lys Pro Gly Ile Gly Gly Arg Glu Arg Trp Asn 85 90 His Val Thr Thr Thr Lys Arg Pro Val Thr Thr Arg Ala Pro Ala 100 105 Asn Thr Leu Gly Asn Asp Phe Asp Leu Ala Asp Ala Leu Asp Asp Arg 120 Asn Asp Arg Asp Asp Gly Arg Arg Lys Pro Ile Ala Gly Gly Gly 135 Phe Ser Asp Lys Asp Leu Glu Asp Ile Val Gly Gly Glu Tyr Lys 150 155 Pro Asp Lys Gly Lys Gly Asp Gly Arg Tyr Gly Ser Asn Asp Asp Pro 165 170 Gly Ser Gly Met Val Ala Glu Pro Gly Thr Ile Ala Gly Val Ala Ser 180 185 190 Ala Leu Ala Met Ala Leu Ile Gly Ala Val Ser Ser Tyr Ile Ser Tyr 195 200 Gln Gln Lys Lys Phe Cys Phe Ser Ile Gln Gln Gly Leu Asn Ala Asp 210 215 220 Tyr Val Lys Gly Glu Asn Leu Glu Ala Val Val Cys Glu Glu Pro Gln 225 230 235 240 Val Lys Tyr Ser Thr Leu His Thr Gln Ser Ala Glu Pro Pro Pro 245 250 Pro Glu Pro Ala Arg Ile * 260 262

<210> 1647 <211> 74 <212> PRT <213> Homo sapiens

_

<210> 1648 <211> 58 <212> PRT <213> Homo sapiens

35 40 45
Asn Ala Met Thr Gly Gly Phe Trp Val *
50 55 57

<210> 1649 <211> 90 <212> PRT <213> Homo sapiens

<400> 1649 Met Gly Val Leu Leu Val Ser Met Val Val Leu Phe Ile Phe Ala Ile 1 5 10 Leu Cys Ile Phe Ile Arg Asn Arg Ile Leu Glu Ile Val Tyr Ala Ser 20 25 30 Leu Gly Ala Leu Leu Phe Thr Cys Phe Leu Ala Val Asp Thr Gln Leu 35 40 45 Leu Leu Gly Asn Lys Gln Leu Ser Leu Ser Pro Glu Glu Tyr Val Phe 55 60 Ala Ala Leu Asn Leu Tyr Thr Asp Ile Ile Asn Ile Phe Leu Tyr Ile 70 Leu Thr Ile Ile Gly Arg Ala Lys Glu * 85

<210> 1650 <211> 113 <212> PRT <213> Homo sapiens

<210> 1651 <211> 50 <212> PRT <213> Homo sapiens

<210> 1652 <211> 121 <212> PRT

<213> Homo sapiens

<400> 1652 Met Ser Arg Ala Gly Met Leu Gly Val Val Cys Ala Leu Leu Val Trp 10 Ala Tyr Leu Ala Val Gly Lys Leu Val Val Arg Met Thr Phe Thr Glu 20 25 Leu Cys Thr His His Pro Trp Ser Leu Arg Cys Glu Ser Phe Cys Arg 40 Ser Arg Val Thr Ala Cys Leu Pro Ala Pro Ala Pro Trp Leu Arg Pro 60 Phe Leu Cys Pro Met Leu Phe Ser Asp Arg Asn Pro Val Glu Cys His 70 Leu Phe Gly Glu Ala Val Ser Asp Pro Val Cys Lys Gly Leu Leu Pro 85 90 His Tyr Phe Trp His Pro Thr Phe Phe Pro Val Lys Ala Asn Cys Leu 100 105 110

<210> 1653 <211> 111 <212> PRT <213> Homo sapiens

Val Ser Phe Cys Pro Thr Thr Val *

<400> 1653

 Met
 Trp
 Ser
 Leu
 Trp
 Ile
 Trp
 Val
 Asp
 Gln
 His
 Gln
 Ala
 Arg
 Leu
 Ile

 Pro
 Ser
 Pro
 Gln
 Val
 Leu
 Leu
 Leu
 Leu
 Arg
 Glu
 Thr
 Pro
 Ser
 Thr

 Ala
 Ala
 Val
 Ala
 Gly
 Trp
 Leu
 Val
 Val
 Ala
 Ser
 Met
 Ala
 Leu
 Leu
 Leu
 Thr
 Ser
 Met
 Ala
 Leu
 Leu
 Ala
 Leu
 Thr
 Pro
 Ala
 Leu
 Leu
 Leu
 Thr
 Ser
 Pro
 Pro
 Pro
 Ala
 Pro
 Pro
 Pro
 Ala
 Pro
 Pro
 Pro
 Ala
 Pro
 Pro
 Pro
 Pro
 Pro
 Ala
 Pro
 Pro
 Pro
 Pro

100 105 110

<210> 1654 <211> 150

<212> PRT

<213> Homo sapiens

<400> 1654

Met Trp Ile Cys Arg Val Lys Gln Ala Trp Leu Pro Pro Leu Leu Ser Pro Leu Gly Pro Pro Thr Pro Trp Asp Pro Phe Tyr Ala Ala Pro Ser 25 Pro Pro Val Trp Val Gly Ser Gly Tyr Trp Tyr Arg Gly Leu Leu Ser 40 Pro Pro Asp Gly Gly Gln Gly Ser Phe Pro Pro His Leu Cys Pro Gln 55 60 Cys Pro Val Gln Ala Gln Ala Gln Ile Gly Pro Tyr Phe Arg Glu Leu 70 75 Gly Glu Pro Pro Ser Glu Thr Lys Trp Tyr Leu Asn Ser His Ser His 90 His Arg Ala Ala Gly Thr Gln Arg Arg Leu Arg Cys Leu Gln His Leu 105 Leu Gly Gly Gly Pro Gly Ile Gly Ser Glu Ser Pro Asn Glu Gly 125 120 Pro Gly Gln Val Thr His Ala Cys Asn Leu Ser Thr Leu Gly Gly Lys 135

<210> 1655

Asp Val Arg Ile Thr 145 149

<211> 68

<212> PRT

<213> Homo sapiens

<400> 1655

 Met
 Ser
 Arg
 Asn
 Leu
 Arg
 Thr
 Ala
 Leu
 Ile
 Phe
 Gly
 Gly
 Phe
 Ile
 Ser

 1
 5
 10
 15
 15

 Leu
 Ile
 Gly
 Ala
 Ala
 Phe
 Tyr
 Phe
 Arg
 Pro
 Leu
 Met
 Arg

 Leu
 Glu
 Glu
 Tyr
 Lys
 Lys
 Glu
 Gln
 Ala
 Ile
 Asn
 Arg
 Ala
 Gly
 Ile
 Val

 Glu
 Glu
 Asp
 Val
 Gln
 Pro
 Pro
 Gly
 Leu
 Lys
 Val
 Trp
 Ser
 Asp
 Pro
 Phe

 Gly
 Arg
 Lys
 *
 60
 60

<210> 1656

<211> 61

<212> PRT

<213> Homo sapiens

<210> 1657 <211> 80 <212> PRT <213> Homo sapiens

tono bapione

<210> 1658 <211> 160 <212> PRT <213> Homo sapiens

<400> 1658 Met Ala Phe Leu Leu Tyr His Leu Val Tyr His Ile Pro Pro Met Ala 10 Pro Val Ser Phe Val Phe Glu Thr Lys Ser Arg Ser Ala Ala Gln Ala 25 Gly Val Gln Trp His Asp Pro Gly Ser Pro Gln Pro Leu Pro Pro Arg 40 Phe Lys Arg Phe Ser Cys His Gly Leu Asn Ile Lys Phe Ala Phe Phe 55 60 Ser His Leu Lys Glu Leu His Leu Asp Ser Gly His Cys Phe Ile Phe 70 75 Ile Arg Leu Val Lys Gly Ala Val Cys Leu Ile His Val Gln Ile Arg 90 Ile Pro Ser Ala Asp Glu Asp Ile Thr Ile Leu Phe Phe Ile Val Ser 105 Lys His Phe Leu Glu Ser Val Phe Lys Met Leu Gln Trp Ser Gln Met 115 120 125 Thr Leu Ala Thr Val Lys Thr Thr Phe Ile Gly Leu Asn Glu Phe Ile 135 Cys Ser Pro Ser Thr Leu Pro Ser Gly Lys Lys Asn Gly Leu Ile *

145 150 155 159

<210> 1659

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1659

 Met
 Trp
 Arg
 Leu
 Pro
 His
 Ser
 Gln
 Phe
 Ile
 His
 Ile
 Val
 Ile
 Leu
 Pro
 15

 Leu
 Lys
 Val
 Phe
 Leu
 Phe
 Cys
 Phe
 Leu
 Arg
 Trp
 Ser
 Phe
 Ser
 Phe
 Ser
 Phe
 Ser
 Phe
 Ser
 Phe
 Ser
 Ile
 His
 Ile
 Ile
 His
 Ile
 Ile
 His
 Ile
 Ile

<210> 1660

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1660

 Met
 Cys
 Ala His
 Leu
 Val
 Cys
 Val
 Lys
 Trp
 Cys
 Leu
 Val
 Ile
 Leu
 Val
 Ile
 Leu
 Val
 Ile
 Leu
 Val
 Ile
 Leu
 Ile
 Leu
 Cys
 Val

 Leu
 Leu
 Ile
 Pro
 Leu
 Ser
 Ser
 Met
 Thr
 Asp
 Leu
 Phe
 Leu
 Ser
 Leu

 Cys
 Val
 Cys
 Val
 Phe
 Cys
 Tyr
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *
 *</td

<210> 1661

<211> 74

<212> PRT

<213> Homo sapiens

<400> 1661

 Met Leu Gly Met Ile Ser Met Leu Leu Asn Ala Leu Lys Leu Leu Val

 1
 5
 10
 15

 Tyr Leu Thr Glu Cys Cys Met Ala Leu Glu Glu Arg Val His Ser Val
 20
 25
 30

 Leu Ile Gly Trp Ser Val Ser Phe Lys Arg Ile Gln Arg Gln Leu Asn
 45

 Gln Val Gly Leu Ile Glu Phe Phe Lys Met Val Leu Cys Ser Asn Thr

Asp Gly Thr Glu Gly His Tyr Pro Lys * 65 70 73

<210> 1662 <211> 271 <212> PRT <213> Homo sapiens

<400> 1662 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr Ala 1 5 10 Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His Asn Val 20 25 Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr Lys Ile Asn 40 45 Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu Leu Trp Asn Ser Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp Arg Gln Phe Leu Ser 70 Ser Gln Pro Arg Ser Gly Ala Gly Leu Ser Ser Arg Ala Val Leu 85 90 Ala Arg Val Gln Ala Leu Gly Trp His Gly Pro Leu Leu Ala Leu Ser 100 105 Phe Leu Ala Phe Trp Val Pro Trp Ala Pro Ala Gly Leu Gln Phe Leu 120 125 Leu Cys Leu Cys Leu Tyr Asp Gly Phe Leu Thr Leu Val Asp Leu His 135 140 His His Ala Leu Leu Ala Asp Leu Ala Leu Ser Ala His Asp Arg Thr 150 155 His Leu Asn Phe Tyr Cys Ser Leu Phe Ser Ala Ala Gly Ser Leu Ser 165 170 175 Val Phe Ala Ser Tyr Ala Phe Trp Asn Lys Glu Asp Phe Ser Ser Phe 185 Arg Ala Phe Cys Val Thr Leu Ala Val Ser Ser Gly Leu Gly Phe Leu 200 Gly Ala Thr Gln Leu Leu Arg Arg Arg Val Glu Ala Ala Arg Lys Asp 210 215 220 Pro Gly Cys Ser Gly Leu Val Val Asp Ser Gly Leu Cys Gly Glu Glu 230 235 Leu Leu Val Gly Ser Glu Glu Ala Asp Ser Ile Thr Leu Gly Arg Tyr 245 250 255 Leu Arg Gln Leu Ala Arg His Arg Asn Phe Leu Cys Phe Ser * 265

<210> 1663 <211> 53 <212> PRT <213> Homo sapiens

```
20 25 30

Lys Tyr Asn Thr Ser Ser Glu Tyr Leu Ser Glu Leu Asp Thr Glu Ala
35 40 45

Ser Arg Val Ser *
50 52
```

<210> 1664 <211> 271 <212> PRT <213> Homo sapiens

<400> 1664 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr Ala 5 10 Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His Asn Val 25 Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr Lys Ile Asn 40 Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu Leu Trp Asn Ser 55 Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp Arg Gln Phe Leu Ser Ser Gln Pro Arg Ser Gly Ala Gly Leu Ser Ser Arg Ala Val Val Leu 90 Ala Arg Val Gln Ala Leu Gly Trp His Gly Pro Leu Leu Ala Leu Ser 105 Phe Leu Ala Phe Trp Val Pro Trp Ala Pro Ala Gly Leu Gln Phe Leu 120 125 Leu Cys Leu Cys Leu Tyr Asp Gly Phe Leu Thr Leu Val Asp Leu His 135 140 His His Ala Leu Leu Ala Asp Leu Ala Leu Ser Ala His Asp Arg Thr 145 150 155 160 His Leu Asn Phe Tyr Cys Ser Leu Phe Ser Ala Ala Gly Ser Leu Ser 165 170 175 Val Phe Ala Ser Tyr Ala Phe Trp Asn Lys Glu Asp Phe Ser Ser Phe 185 Arg Ala Phe Cys Val Thr Leu Ala Val Ser Ser Gly Leu Gly Phe Leu 200 Gly Ala Thr Gln Leu Leu Arg Arg Val Glu Ala Ala Arg Lys Asp 210 215 Pro Gly Cys Ser Gly Leu Val Val Asp Ser Gly Leu Cys Gly Glu Glu 235 230 Leu Leu Val Gly Ser Glu Glu Ala Asp Ser Ile Thr Leu Gly Arg Tyr 250 Leu Arg Gln Leu Ala Arg His Arg Asn Phe Leu Cys Phe Ser * 265

<210> 1665 <211> 284 <212> PRT <213> Homo sapiens

<400> 1665

```
Met Asp Glu Lys Ser Asn Lys Leu Leu Leu Ala Leu Val Met Leu Phe
              5
Leu Phe Ala Val Ile Val Leu Gln Tyr Val Cys Pro Gly Thr Glu Cys
           20
                             25
Gln Leu Leu Arg Leu Gln Ala Phe Ser Ser Pro Val Pro Asp Pro Tyr
                         40
Arg Ser Glu Asp Glu Ser Ser Ala Arg Phe Val Pro Arg Tyr Asn Phe
                      55
Thr Arg Gly Asp Leu Leu Arg Lys Val Asp Phe Asp Ile Lys Gly Asp
                  70
Asp Leu Ile Val Phe Leu His Ile Gln Lys Thr Gly Gly Thr Thr Phe
              85
                                90
Gly Arg His Leu Val Arg Asn Ile Gln Leu Glu Gln Pro Cys Glu Cys
                            105
Arg Val Gly Gln Lys Lys Cys Thr Cys His Arg Pro Gly Lys Arg Glu
                       120
Thr Trp Leu Phe Ser Arg Phe Ser Thr Gly Trp Ser Cys Gly Leu His
         135
Ala Asp Trp Thr Glu Leu Thr Ser Cys Val Pro Ser Val Gly Asp Gly
        150
                        155
Lys Arg Asp Ala Arg Leu Arg Pro Ser Arg Trp Arg Ile Phe His Ile
             165
                    170
Leu Tyr Ala Ala Cys Thr Asp Ile Arg Gly Ser Pro Asn Thr Asn Ala
          180
                           185
Gly Ala Asn Ser Pro Ser Phe Thr Lys Thr Arg Asn Thr Ser Lys Ser
                        200
                                       205
Trp Lys Asn Phe His Tyr Ile Thr Ile Leu Gln Asp Pro Gly Ala Arg
                     215
                                       220
Ser Leu Ser Glu Trp Arg Pro Val Leu Lys Arg Gly Thr Leu Glu Gly
        230
                                   235
Leu Leu Ala Cys Trp Pro Trp Lys Ala Pro Pro Pro Leu Lys Lys Leu
                       250 255
             245
Ser Thr Trp Tyr Pro Gly Glu Glu Leu Val Trp Leu Ala Pro Leu Gln
                          265
Lys Ile Ile Gly Leu Ala Leu Leu Ile Tyr Pro *
```

<210> 1666 <211> 67 <212> PRT

<213> Homo sapiens

<210> 1667 <211> 79 <212> PRT <213> Homo sapiens

<400> 1667

<210> 1668 <211> 54 <212> PRT <213> Homo sapiens

<400> 1668

 Met Trp Gly Leu Leu Leu Ile Pro Cys Ile Leu Gly Cys Met Lys Leu Pro 1
 5
 10
 15

 His Asn Leu Leu Met Leu Phe Ser Leu Glu Thr Phe Leu Thr Leu Arg 20
 25
 30

 Phe Ile Leu Asp Ser Phe Tyr Ser Tyr Val Phe Lys Pro Thr Asn Lys 35
 45

 Arg Phe Cys Asn Ile *
 50

<210> 1669 <211> 119 <212> PRT <213> Homo sapiens

<400> 1669 Met Met Ala Gly Ile Arg Ala Leu Phe Met Tyr Leu Trp Leu Gln Leu 1 5 10 Asp Trp Val Ser Arg Gly Glu Ser Val Gly Leu His Leu Pro Thr Leu 25 Ser Val Gln Glu Gly Asp Asn Ser Ile Ile Asn Cys Ala Tyr Ser Asn 40 Ser Ala Ser Asp Tyr Phe Ile Trp Tyr Lys Gln Glu Ser Gly Lys Gly 55 Pro Gln Phe Ile Ile Asp Ile Arg Ser Asn Met Asp Lys Arg Gln Gly 70 75 Gln Arg Val Thr Val Leu Leu Asn Lys Thr Val Lys His Leu Ser Leu 85 90 Gln Ile Ala Ala Thr Gln Pro Gly Asp Ser Ala Val Tyr Phe Cys Ala 105

Glu Ile Pro Glu Gln Arg * 115 118

<210> 1670

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1670

Met Cys Leu Leu Cys Cys Glu Cys Leu Phe His Leu Trp Lys Arg Ile 1 5 10 Asn Trp Trp Gln Gly Phe Cys Ser Phe Tyr Leu Leu Leu Trp Val Gly 25 Leu Leu Ser Phe Pro Pro Asp Pro Pro Trp Lys Ser Phe Thr Pro Ala 40 Ile Leu Phe Leu Ala Trp Gly Thr Gly Ser Ser Pro Gly Arg His Arg 55 60 Phe Ser Leu Pro Thr Asp Arg Arg Pro Ser Ala His Ser Pro Phe Leu 70 75 Ser Thr Leu Gln His Ser Ile Arg Thr Leu Phe His Ser Pro Ile Arg 90 Ser Ser Arg Phe Ala Phe Val Ser Ser Leu His Ser Tyr Thr Ser Ile 100 105 Pro Ser Leu Pro

<210> 1671

115 116

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1671

 Met
 Ser
 His
 Cys
 Gly
 Leu
 Leu
 Phe
 Leu
 Val
 Val
 Thr
 Trp
 Leu
 Leu
 Ser

 Phe
 Ile
 Phe
 Leu
 Val
 Cys
 Lys
 Met
 Arg
 Ile
 Thr
 Phe
 Leu
 Phe
 Cys
 Leu

 Leu
 Thr
 Val
 Asp
 Met
 Lys
 Pro
 Asn
 Lys
 Val
 Leu
 Tyr
 Met
 Lys
 Cys
 Phe

 Lys
 Cys
 Ile
 Leu
 Leu
 Ser
 Cys
 Tyr
 Pro
 Leu
 Lys
 Phe
 Leu
 Val
 Ile

 Lys
 Cys
 Ile
 Leu
 Leu
 Ser
 Cys
 Tyr
 Pro
 Leu
 Lys
 Phe
 Leu
 Val
 Ile

 Lys
 Cys
 Ile
 Leu
 Ser
 Cys
 Tyr
 Pro
 Leu
 Lys
 Phe
 Leu
 Val
 Ile
 </tr

<210> 1672

<211> 263

<212> PRT

<213> Homo sapiens

<400> 1672

Met Arg Val Leu Cys Ala Phe Pro Glu Ala Met Pro Ser Ser Asn Ser

10 Arg Pro Pro Ala Cys Leu Ala Pro Gly Ala Leu Tyr Leu Ala Leu Leu 20 25 Leu His Leu Ser Leu Ser Ser Gln Ala Gly Asp Arg Arg Pro Leu Pro 40 Val Asp Arg Ala Ala Gly Leu Lys Glu Lys Thr Leu Ile Leu Leu Asp 55 Val Ser Thr Lys Asn Pro Val Arg Thr Val Asn Glu Asn Phe Leu Ser 70 75 Leu Gln Leu Asp Pro Ser Ile Ile His Asp Gly Trp Leu Asp Phe Leu 90 Ser Ser Lys Arg Leu Val Thr Leu Ala Arg Gly Leu Ser Pro Ala Phe 105 Leu Arg Phe Gly Gly Lys Arg Thr Asp Phe Leu Gln Phe Gln Asn Leu 120 Arg Asn Pro Ala Lys Ser Arg Gly Gly Pro Gly Pro Asp Tyr Tyr Leu 135 Lys Asn Tyr Glu Asp Asp Ile Val Arg Ser Asp Val Ala Leu Asp Lys 150 155 Gln Lys Gly Cys Lys Ile Ala Gln His Pro Asp Gly Met Leu Glu Pro 165 170 Pro Arg Glu Lys Ala Ala Gln Met His Leu Val Leu Leu Lys Glu Gln 180 185 Phe Ser Asn Thr Tyr Ser Asn Leu Ile Leu Thr Glu Pro Asn Asn Tyr 200 Arg Thr Met His Gly Arg Ala Val Asn Gly Ser Gln Leu Gly Lys Asp 215 220 Tyr Ile Gln Leu Lys Ser Leu Leu Gln Pro Ile Arg Ile Tyr Ser Arg 230 235 Ala Ser Leu Tyr Gly Pro Asn Ile Val Arg Pro Arg Lys Asn Val Ile 245 250 Ala Leu Leu Asp Gly Leu * 260 262

<210> 1673 <211> 156 <212> PRT <213> Homo sapiens

<400> 1673 Met Lys Trp Lys Thr Gly Val Ala Ile Phe Val Val Val Val Tyr 10 Leu Val Thr Gly Gly Leu Val Phe Arg Ala Leu Glu Gln Pro Phe Glu 20 Ser Ser Gln Lys Asn Thr Ile Ala Leu Glu Lys Ala Glu Phe Leu Arg Asp His Val Cys Val Ser Pro Gln Glu Leu Glu Thr Leu Ile Gln His 55 60 Ala Leu Asp Ala Asp Asn Ala Gly Val Ser Pro Ile Gly Asn Ser Ser 75 Asn Asn Ser Ser His Trp Asp Leu Gly Ser Ala Phe Phe Phe Ala Gly 90 Thr Val Ile Thr Thr Ile Gly Tyr Gly Asn Ile Ala Pro Ser Thr Glu 105 Gly Gly Lys Ile Phe Cys Ile Leu Tyr Ala Ile Phe Gly Phe Pro Leu 120

Phe Gly Phe Leu Leu Ala Gly Ile Glu Asp Gln Leu Gly Thr Ile Phe 130 135 140 Gly Lys Ser Ile Ala Arg Val Glu Lys Val Phe * 145 150 155

<210> 1674 <211> 83 <212> PRT <213> Homo sapiens

<400> 1674 Met Cys Cys Val Ile Cys Ser Lys Gln Tyr Val Leu Leu Ser Ile Leu 1 5 10 Leu Cys Leu Leu Ala Ser Gly Ser Val Asp Phe Phe Leu Leu Pro His 20 25 Ser Val Leu Ala Asp Asp Asp Gly Ile Lys Val Val Lys Val Thr Phe 40 Asn Lys Gln Asp Ser Leu Val Ile Leu Thr Ile Met Val Ser Leu Thr 55 60 Val Ser Phe Pro Gly Leu Cys Thr Cys Gln Ala Gly Thr Gln Asp Thr 65 70 Tyr Thr * 82

<210> 1675 <211> 54 <212> PRT <213> Homo sapiens

<210> 1676 <211> 119 <212> PRT <213> Homo sapiens

<210> 1677 <211> 49 <212> PRT <213> Homo sapiens

<210> 1678 <211> 127 <212> PRT <213> Homo sapiens

<400> 1678 Met Gln Thr Lys Gly Gln Thr Trp Ala Arg Arg Ala Leu Leu Leu 10 Gly Ile Leu Trp Ala Thr Ala His Leu Pro Leu Ser Gly Thr Ser Leu 20 25 Pro Gln Arg Leu Pro Arg Ala Thr Gly Asn Ser Thr Gln Cys Val Ile 35 40 Ser Pro Ser Ser Glu Phe Pro Glu Gly Phe Phe Thr Arg Gln Glu Arg Arg Asp Gly Gly Ile Ile Ile Tyr Phe Leu Ile Ile Val Tyr Met Phe 75 80 70 Met Ala Ile Ser Ile Val Cys Asp Glu Tyr Phe Leu Pro Ser Leu Glu 90 Ile Ile Ser Glu Tyr Ile Gly Asn Lys Lys Glu Met Gln Val Leu Ile 105

Pro Gly Arg Ile Val Ser Lys Leu Lys Lys Leu Gly Phe Lys *

<210> 1679

<211> 49 <212> PRT <213> Homo sapiens

<400> 1679

<210> 1680 <211> 58 <212> PRT <213> Homo sapiens

20 25 30
Ala Ile Ser Ala Arg Cys Asn Leu His Leu Arg Ile Pro Pro Asp Phe

35 40
His Arg Ser Thr Met Gly Gly Gly Gly Gly
50 55 58

<210> 1681 <211> 49 <212> PRT

<213> Homo sapiens

<400> 1681

 Met
 Leu
 Ser
 Gly
 Trp
 Val
 Gln
 Cys
 Pro
 Leu
 Leu
 Gln
 Arg
 Val
 Leu
 Gly
 Phe
 His
 Arg
 Lys
 Ile
 Trp
 Gly
 Asp
 Val

 20
 25
 25
 30
 30
 30
 Ser
 Phe
 Pro
 Leu
 Thr
 Phe
 Tyr
 Phe
 Lys
 Asn
 Leu
 Gln
 Thr
 Gln
 Lys
 Ser

 35
 40
 45
 48

<210> 1682 <211> 78 <212> PRT <213> Homo sapiens

<210> 1683 <211> 52 <212> PRT <213> Homo sapiens

<210> 1684 <211> 165 <212> PRT <213> Homo sapiens

<400> 1684 Met Pro Ala Pro Pro Leu Pro Gly Gly Trp Asn Thr Trp Gly Pro Ser 1 5 10 Leu Ser Leu Pro Leu Leu Leu Gly Ala Val Ala Met Ala Leu Gly 20 25 Val Arg Pro Pro Gly Gln Val Gly Leu Ser Pro Ile Ala Thr Ala Ser 40 45 Thr Val Gly Val Pro Arg Cys Leu Gln Thr Ala Phe Arg Gly Asp Ala 55 Gly Trp His Ser Cys Ala Gln Gln Gly Ala Cys Val Ala Leu His Pro 75 Ser Glu Arg Arg Leu Gly Ile Ser Asp Glu Ala His Ser Arg Ser Arg 85 90 95 Trp Gly Glu Asp Ser Pro Ser Pro Leu Thr Gly Pro Pro Leu Ser 100 105 110 Pro Ser Pro Pro Asp Cys Leu Ser Leu Pro Arg Leu Thr Pro Leu Arg 115 120 125 Leu Pro Pro Pro Pro Phe Pro Phe Leu Gly Pro Ile Pro Ser Leu Pro 130 135 140 Pro Pro Pro Ser Pro Pro Pro Gln Pro Pro Ala Thr Ala Pro Pro 145 150 155

Ser Leu Arg Phe * 164

<210> 1685 <211> 153 <212> PRT <213> Homo sapiens

<400> 1685 Met Gly Thr Ala Ala Leu Gly Pro Val Trp Ala Ala Leu Leu Phe 10 Leu Leu Met Cys Glu Ile Pro Met Val Glu Leu Thr Phe Asp Arg Ala 20 25 Val Ala Ser Gly Cys Gln Arg Cys Cys Asp Ser Glu Asp Pro Leu Asp 40 Pro Ala His Val Ser Ser Ala Ser Ser Ser Gly Arg Pro His Ala Leu 55 Pro Glu Ile Arg Pro Tyr Ile Asn Ile Thr Ile Leu Lys Ala Gln Arg 70 Ala Gln His His Ala Glu Pro Glu Cys Asp Ala Gly Pro Gly Leu Arg 85 90 Gly Pro Arg Leu Gly Ala Ala Leu Gln Ala Pro Ala Arg Glu Arg His 105 Leu Gln Gln Arg Leu Arg His Leu His His Leu Gln Arg Pro Pro His 120 125 Gln Gly Arg Gly Arg Leu Arg Ala Ser Gly Pro Pro Ser Arg Leu Glu 135 Ser Ser Ala Asp Pro Ala Pro Ala *

150 152

<210> 1686 <211> 141 <212> PRT <213> Homo sapiens

<400> 1686 Met Arg Arg Thr Ala Phe Ile Leu Gly Ser Gly Leu Leu Ser Phe Val 10 Ala Phe Trp Asn Ser Val Thr Trp His Leu Gln Arg Phe Trp Gly Ala 20 25 Ser Gly Tyr Phe Trp Gln Ala Gln Trp Glu Arg Leu Leu Thr Thr Phe 40 Glu Gly Lys Glu Trp Ile Leu Phe Phe Ile Gly Ala Ile Gln Val Pro Cys Leu Phe Phe Trp Ser Phe Asn Gly Leu Leu Leu Val Val Asp Thr 70 Thr Gly Lys Pro Asn Phe Ile Ser Arg Tyr Arg Ile Gln Val Gly Lys 85 90 Asn Glu Pro Val Asp Pro Val Lys Leu Arg Gln Ser Ile Arg Thr Val 105 110 Leu Phe Asn Gln Cys Met Ile Ser Phe Pro Met Gly Gly Leu Pro Leu 120 Ser Leu Pro Gln Met Val Glu Arg Pro Leu Thr Pro *

130 135 140

<210> 1687 <211> 61 <212> PRT <213> Homo sapiens

<400> 1687

<210> 1688 <211> 68 <212> PRT <213> Homo sapiens

<400> 1688

<210> 1689 <211> 74 <212> PRT <213> Homo sapiens

<210> 1690 <211> 114 <212> PRT <213> Homo sapiens

<400> 1690 Met His Met Cys Ala Phe Leu His Val Trp Thr Cys Ala Cys Met His 1 5 Leu Cys Val Cys Val Cys Ala Glu Thr Gly Lys Gly Val Lys Val Leu 20 25 Val Arg Glu Pro Gly Ser Phe Leu Phe Pro Asn Leu Ser Cys Ser Lys 40 Glu Gly Trp Gly Trp Gly Gln Pro Leu Leu Lys Val Ile Gly Glu Glu 55 Arg Phe Ser Asp Ser Glu Val Thr Ala Ser Val Ala Gln Ala Val Ser 70 75 Leu Val Thr Val Ile Leu Gln Phe Ser Asp Pro His Val Ser Phe Arg 90 . 95 Gly Lys Arg Lys Lys Gly Thr Leu Trp Trp Val Leu Gly Gly Lys Arg 105 Lys * 113

<210> 1691 <211> 69 <212> PRT

<213> Homo sapiens

<210> 1692 <211> 103 <212> PRT <213> Homo sapiens

<210> 1693 <211> 48 <212> PRT <213> Homo sapiens

<210> 1694 <211> 92 <212> PRT <213> Homo sapiens

<210> 1695 <211> 83 <212> PRT <213> Homo sapiens

<210> 1696 <211> 159 <212> PRT

<213> Homo sapiens

<400> 1696 Met Leu Trp Leu Phe Gln Ser Leu Leu Phe Val Phe Cys Phe Gly Pro 10 Gly Asn Val Val Ser Gln Ser Ser Leu Thr Pro Leu Met Val Asn Gly 25 Ile Leu Gly Glu Ser Val Thr Leu Pro Leu Glu Phe Pro Ala Gly Glu 35 40 45 Lys Val Asn Phe Ile Thr Trp Leu Phe Asn Glu Thr Ser Leu Ala Phe 50 55 60 Ile Val Pro His Glu Thr Lys Ser Pro Glu Ile His Val Thr Asn Pro 70 75 80 Lys Gln Gly Lys Arg Leu Asn Phe Thr Gln Ser Tyr Ser Leu Gln Leu 90 Ser Asn Leu Lys Met Glu Asp Thr Gly Ser Tyr Arg Ala Gln Ile Ser 100 105 110 Thr Lys Thr Ser Ala Lys Leu Ser Ser Tyr Thr Leu Arg Ile Leu Thr 125 120 Leu Tyr Pro Ile Val Gly Asn Gly Ile Trp Gly Asn Lys Asn Phe Leu 135 Thr Thr Leu Ala Arg Gly Asn Val Lys Leu Asp Gly Leu His Glu 150

<210> 1697 <211> 105 <212> PRT <213> Homo sapiens

| The color of the

<210> 1698 <211> 195 <212> PRT <213> Homo sapiens

<400> 1698 Met Pro Ser Trp Ile Gly Ala Val Ile Leu Pro Leu Leu Gly Leu Leu Leu Ser Leu Pro Ala Gly Ala Asp Val Lys Ala Arg Ser Cys Gly Glu Val Arg Gln Ala Tyr Gly Ala Lys Gly Phe Ser Leu Ala Asp Ile Pro Tyr Gln Glu Ile Ala Gly Glu His Leu Arg Ile Cys Pro Gln Glu Tyr 55 Thr Cys Cys Thr Thr Glu Met Glu Asp Lys Leu Ser Gln Gln Ser Lys 70 Leu Glu Phe Glu Asn Leu Val Glu Glu Thr Ser His Phe Val Arg Thr Thr Phe Val Ser Arg His Lys Lys Phe Asp Glu Phe Phe Arg Glu Leu 100 105 110 Leu Glu Asn Ala Glu Lys Ser Leu Asn Asp Met Phe Val Arg Thr Tyr 115 120 125 Gly Met Leu Tyr Met Gln Asn Ser Glu Val Phe Gln Asp Leu Phe Thr 135 Glu Leu Lys Arg Tyr Tyr Thr Gly Gly Asn Val Asn Leu Glu Glu Met 150 Leu Asn Asp Phe Trp Ala Arg Leu Leu Glu Arg Met Phe Gln Leu Ile 165 170 Asn Pro Gln Tyr Pro Phe Ser Glu Gly Phe Leu Gly Met Cys Glu Gln 180 185

<210> 1699 <211> 97 <212> PRT <213> Homo sapiens

Ile Pro *

 Pro
 Val
 Cys
 Ala
 Ala
 Asn
 Gly
 Ala
 Met
 Ser
 Ala
 Ser
 Arg
 Asn
 Leu
 Arg

 Thr
 Leu
 Lys
 Gly
 Arg
 Thr
 Ala
 Pro
 Gly
 Ser
 Thr
 Leu
 Pro
 Leu
 Arg
 Arg
 Arg
 Arg
 Arg
 Arg
 Cys
 Leu
 Met
 Ser
 Thr
 Phe
 Ser
 Arg
 Trp

 Arg
 Fro
 Pro
 Pro
 Cys
 Gln
 Cys
 Leu
 Pro
 Arg
 Ser
 Leu
 His
 Thr
 Gln
 Thr

 Leu
 Arg
 Ser
 Pro
 Cys
 Gln
 Cys
 Leu
 Pro
 Arg
 Ser
 Leu
 His
 Thr
 Gln
 Thr

 Leu
 Arg
 Ser
 Pro
 Cys
 Gln
 Cys
 Leu
 Pro
 Arg
 Ser
 Leu
 His
 Thr
 Gln
 Thr

 Leu
 Arg
 Ser
 Pro
 Arg
 Ser
 Leu
 Pro
 A

<210> 1700 <211> 129 <212> PRT

<213> Homo sapiens

<400> 1700 Met Gly Trp Ala Pro Leu Leu Leu Thr Leu Leu Ala His Cys Thr Gly Ser Trp Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Glu Ser Glu Ala 20 25 Pro Gly Gln Trp Val Asn Ile Ser Cys Thr Gly Ser Gly Ser Asn Leu 40 Gly Ala Gly Phe Asp Val Gln Trp Tyr Gln Leu Ile Pro Gly Thr Ala 55 Pro Lys Leu Leu Ile Phe Asn Asn Asn Arg Gln Pro Ser Gly Val Pro 70 75 Asp Arg Phe Ser Ala Ser Lys Ser Gly Thr Ser Ala Ser Leu Thr Ile 90 Asn Asp Leu Gln Pro Glu Asp Glu Ser Glu Tyr Tyr Cys Leu Ala Met 100 105 Thr Ala Ala Ser Leu Val Ser Ser Glu Leu Gly Pro Lys Ser Pro Ala 120 125

<210> 1701 <211> 219 <212> PRT <213> Homo sapiens

90 Arg Trp Asn Glu Ile Phe Gly Asn Asn Leu Gly Ala Leu Ala Met Phe 105 Cys Val Leu Tyr Pro Glu Asn Ile Glu Ala Arg Asp Met Ala Lys Asp 120 Tyr Met Glu Arg Met Ala Ala Gln Pro Ser Trp Leu Val Lys Asp Ala 135 Pro Trp Asp Glu Val Pro Leu Ala His Ser Leu Val Gly Phe Ala Thr 150 155 Ala Tyr Asp Phe Leu Tyr Asn His Leu Ser Lys Thr Gln Gln Glu Lys 165 170 175 Phe Leu Glu Val Ile Ala Asn Ala Ser Gly Tyr Met Phe Val Thr Leu 180 185 190 Ile Leu Gly Ala Asp Gly Asp Ser Asn Thr Cys Thr Ile Ile Ser Pro 195 200 Pro Thr Val Trp Leu Cys Ser Arg Glu Ala * 215 218

<210> 1702 <211> 86 <212> PRT <213> Homo sapiens

 400> 1702

 Met Glu Gln Leu Leu Gly Ile Lys Leu Gly Cys Leu Phe Ala Leu Leu 1
 5
 10
 15
 15

 Ala Leu Thr Leu Gly Cys Gly Leu Thr Pro Ile Cys Phe Lys Trp Phe 20
 25
 30
 30

 Gln Ile Asp Ala Ala Arg Gly His His Arg Leu Val Leu Arg Leu Leu 35
 40
 45

 Gly Cys Ile Ser Ala Gly Val Phe Leu Gly Ala Gly Phe Met His Met 50
 55
 60

 Thr Ala Glu Ala Leu Glu Glu Glu Ile Glu Ser Gln Ile Gln Lys Phe Met 65
 70
 75
 80

 Val Gln Ile Ser Lys *
 *

<210> 1703 <211> 229 <212> PRT <213> Homo sapiens

Phe Cys Asp Met Thr Ser Gly Gly Gly Gly Trp Thr Leu Val Ala Ser 90 Val His Glu Asn Asp Met His Gly Lys Cys Thr Val Gly Asp Arg Trp 105 Ser Ser Gln Gln Gly Asn Lys Ala Asp Tyr Pro Glu Gly Asp Gly Asn 120 Trp Ala Asn Tyr Asn Thr Phe Gly Ser Ala Glu Ala Ala Thr Ser Asp 135 Asp Tyr Lys Asn Pro Gly Tyr Tyr Asp Ile Gln Ala Lys Asp Leu Gly 150 155 Ile Trp His Val Pro Asn Lys Ser Pro Met Gln His Trp Arg Asn Ser 165 170 Ala Leu Leu Arg Tyr Arg Thr Asn Thr Gly Phe Leu Gln Arg Leu Gly 180 185 His Asn Leu Phe Gly Ile Tyr Gln Lys Tyr Pro Val Lys Tyr Arg Ser 195 200 205 Gly Lys Cys Trp Asn Asp Asn Gly Pro Ala Ile Pro Trp Val Tyr Asp 215 Phe Gly Glu Ala * 225 228

<210> 1704 <211> 202 <212> PRT

<213> Homo sapiens

<400> 1704 Met Val Phe Pro Val Met Tyr Asn Leu Ile Ile Leu Val Cys Arg Ala 5 10 Cys Phe Pro Asp Leu Gln His Gly Tyr Leu Val Ala Trp Leu Val Leu 20 25 Asp Tyr Thr Ser Asp Leu Leu Tyr Leu Leu Asp Met Val Val Arg Phe 40 . His Thr Gly Phe Leu Glu Gln Gly Ile Leu Val Val Asp Lys Gly Arg 55 60 Ile Ser Ser Arg Tyr Val Arg Thr Trp Ser Phe Phe Leu Asp Leu Ala 70 Ser Leu Met Pro Thr Asp Val Val Tyr Val Arg Leu Gly Pro His Thr 85 90 Pro Thr Leu Arg Leu Asn Arg Phe Leu Arg Ala Pro Arg Leu Phe Glu 105 Ala Phe Asp Arg Thr Glu Thr Arg Thr Ala Tyr Pro Asn Ala Phe Cys 120 125 Ile Gly Lys Leu Met Leu Tyr Ile Phe Gly Arg Ile His Trp Asn Asn 135 140 Cys Leu Tyr Phe Ser Leu Ser Arg Tyr Leu Gly Phe Gly Arg Glu Pro 150 155 Met Gly Val Pro Arg Thr Pro Ala Pro Thr Trp Val Leu Thr Ala Arg 165 170 175 Gly Gly Pro Val Thr Ser Tyr Lys Leu Phe Asn Phe Phe His Pro Leu 180 185 . 190 Asp Thr Trp Ile Ile Gln Gly Gly Glu *

<210> 1705 <211> 58 <212> PRT <213> Homo sapiens

<400> 1705

 Met Gly Leu Leu Gly Val Leu Trp Asn Thr Thr Leu His Met Cys Arg

 1
 5
 10
 5
 15

 Met Arg Leu Gln Asp Thr Gly Gln Lys Ile Arg Thr Gly Ser Cys Glu
 20
 25
 30

 Leu His Gly Ser Gln Ser Ser His Ser Thr Gly Asn Leu Arg Val Leu
 35
 40
 45

 Pro Ser His Asn Gly Glu Thr Leu His 50
 55
 57
 57

<210> 1706 <211> 55 <212> PRT <213> Homo sapiens

<210> 1707 <211> 139 <212> PRT <213> Homo sapiens

<400> 1707 Met Leu Glu Cys Ala Phe Ile Val Leu Trp Leu Gln Leu Gly Trp Leu 1 5 10 Ser Gly Glu Asp Gln Val Thr Gln Ser Pro Glu Ala Leu Arg Leu Gln 25 Glu Glý Glu Ser Ser Ser Leu Asn Cys Ser Tyr Thr Val Ser Gly Leu 35 40 Arg Gly Leu Phe Trp Tyr Arg Gln Asp Pro Gly Lys Gly Pro Glu Phe 50 55 Leu Phe Thr Leu Tyr Ser Ala Gly Glu Glu Lys Glu Lys Glu Arg Leu 70 75 Lys Ala Thr Leu Thr Lys Lys Glu Ser Phe Leu His Ile Thr Ala Pro 85 90 Lys Pro Glu Asp Ser Ala Thr Tyr Leu Cys Ala Val Gln Ala Gln Phe 100 105 110 His Ser Gly Gly Gly Ala Asp Gly Leu Thr Phe Gly Lys Gly Thr Arg 120

Leu Lys Val Leu Ala Leu Tyr Pro Glu Pro * 130 135 138

<210> 1708

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1708

<210> 1709

<211> 81

<212> PRT

<213> Homo sapiens

<400> 1709

 Met
 Arg
 Leu
 Pro
 Trp
 Glu
 Leu
 Leu
 Val
 Leu
 Gln
 Ser
 Phe
 Ile
 Leu
 Cys

 Leu
 Ala
 Asp
 Asp
 Ser
 Thr
 Leu
 His
 Gly
 Pro
 Ile
 Phe
 Ile
 Gln
 Gln
 Pro

 Ser
 Pro
 Val
 Met
 Phe
 Pro
 Leu
 Asp
 Ser
 Glu
 Glu
 Lys
 Lys
 Ala
 Lys
 Leu

 Asn
 Cys
 Glu
 Asp
 Lys
 Gly
 Asp
 Pro
 Lys
 Pro
 His
 Ile
 Arg
 Trp
 Lys
 Leu

 Asn
 Gly
 Ala
 Asp
 Thr
 Gly
 Met
 Glu
 Phe
 Leu
 Gln
 Arg
 Cys

 Asn
 Gly
 Ala
 Asp
 Thr
 Gly
 Met
 Glu
 Phe
 Leu
 Leu
 Gln
 Arg
 Cys

 <t

<210> 1710

<211> 399

<212> PRT

<213> Homo sapiens

<400> 1710

```
50
                      55
Ile Asn Leu Thr Trp His Lys Asn Asp Ser Ala Arg Thr Val Pro Gly
                 70
                                   75
Glu Glu Glu Thr Arg Met Trp Ala Gln Asp Gly Ala Leu Trp Leu Leu
              85
                                90
Pro Ala Leu Gln Glu Asp Ser Gly Thr Tyr Val Cys Thr Thr Arg Asn
                           105
Ala Ser Tyr Cys Asp Lys Met Ser Ile Glu Leu Arg Val Phe Glu Asn
             120
Thr Asp Ala Phe Leu Pro Phe Ile Ser Tyr Pro Gln Ile Leu Thr Leu
                   135
                            140
Ser Thr Ser Gly Val Leu Val Cys Pro Asp Leu Ser Glu Phe Thr Arg
                 150
                                  155
Asp Lys Thr Asp Val Lys Ile Gln Trp Tyr Lys Asp Ser Leu Leu
                  . 170
Asp Lys Asp Asn Glu Lys Phe Leu Ser Val Arg Gly Thr Thr His Leu
                            185
Leu Val His Asp Val Ala Leu Glu Asp Ala Gly Tyr Tyr Arg Cys Val
                       200
Leu Thr Phe Ala His Glu Gly Gln Gln Tyr Asn Ile Thr Arg Ser Ile
                    215
                                    220
Glu Leu Arg Ile Lys Lys Lys Glu Glu Thr Ile Pro Val Ile Ile
                230
                                  235
Ser Pro Leu Lys Thr Ile Ser Ala Ser Leu Gly Ser Arg Leu Thr Ile
                      250
Pro Cys Lys Val Phe Leu Gly Thr Gly Thr Pro Leu Thr Thr Met Leu
                           265
Trp Trp Thr Ala Asn Asp Thr His Ile Glu Ser Ala Tyr Pro Gly Gly
      275 280
Arg Val Thr Glu Gly Pro Arg Gln Glu Tyr Ser Glu Asn Asn Glu Asn
        295
                          300
Tyr Ile Glu Val Pro Leu Ile Phe Asp Pro Val Thr Arg Glu Asp Leu
              310
                        315
His Met Asp Phe Lys Cys Val Val His Asn Thr Leu Ser Phe Gln Thr
                               330
Leu Arg Thr Thr Val Lys Glu Ala Ser Ser Thr Phe Ser Trp Gly Ile
          340
                            345
Val Leu Ala Pro Leu Ser Leu Ala Phe Leu Val Leu Gly Gly Ile Trp
     355 . 360
Met His Arg Arg Cys Lys His Arg Thr Gly Lys Ala Asp Gly Leu Thr
                    375
                                      380
Val Leu Trp Pro His His Gln Asp Phe Gln Ser Tyr Pro Lys *
```

<210> 1711 <211> 254 <212> PRT <213> Homo sapiens

Ile Ser Cys Pro His Glu Cys Phe Glu Ala Ile Leu Ser Leu Asp Thr 55 Gly Tyr Arg Ala Pro Val Thr Leu Val Arg Lys Gly Cys Trp Thr Gly . 75 Pro Pro Ala Gly Gln Thr Gln Ser Asn Ala Asp Ala Leu Pro Pro Asp 90 Tyr Ser Val Val Arg Gly Cys Thr Thr Asp Lys Cys Asn Ala His Leu 100 105 Met Thr His Asp Ala Leu Pro Asn Leu Ser Gln Ala Pro Asp Pro Pro 120 Thr Leu Ser Gly Leu Glu Cys Tyr Ala Cys Ile Gly Val His Gln Asp 135 140 Asp Cys Ala Ile Gly Arg Ser Arg Arg Val Gln Cys His Gln Asp Gln 150 155 Thr Ala Cys Phe Gln Gly Asn Gly Arg Met Thr Val Gly Asn Phe Ser 165 170 Val Pro Val Tyr Ile Arg Thr Cys His Arg Ala Leu Leu His His Leu 180 185 Met Gly Thr Thr Ser Pro Trp Thr Ala Ile Gly Pro Pro Arg Gly Ser . 200 Cys Cys Glu Gly Tyr Leu Cys Asn Arg Lys Ser Met Thr Gln Pro Phe 215 Thr Ser Ala Ser Ala Thr Thr Pro Pro Arg Ala Leu Gln Val Leu Ala 225 230 235 Leu Leu Pro Val Leu Leu Val Gly Leu Ser Ala * 245 250 253

<210> 1712 <211> 124 <212> PRT

<213> Homo sapiens

<400> 1712 Met Thr Trp Leu Leu Val Ala Tyr Ala Asp Phe Val Val Thr Phe Val 10 Met Leu Leu Pro Ser Lys Asp Phe Trp Tyr Ser Val Val Asn Gly Val 25 Ile Phe Asn Cys Leu Ala Val Leu Ala Leu Ser Ser His Leu Arg Thr 40 45 Met Leu Thr Asp Pro Glu Lys Ser Ser Asp Cys Arg Pro Ser Ala Cys 55 60 Thr Val Lys Thr Gly Leu Asp Pro Thr Leu Val Gly Ile Cys Gly Glu 75 Gly Thr Glu Ser Val Gln Ser Leu Leu Gly Ala Val Pro Lys Gly 85 90 Asn Ala Thr Lys Glu Tyr Met Asp Glu Leu Ala Ala Glu Ala Arg Gly 100 105 Ser His Leu Gln Val Pro Gln Val Leu Leu Tyr * 115 120 123

<210> 1713 <211> 214 <212> PRT <213> Homo sapiens

<400> 1713 Met Leu His Leu Val Phe Ile Leu Pro Ser Leu Met Leu Leu Ile Pro 10 His Ile Leu Leu Glu Asn Phe Ala Ala Ala Ile Pro Gly His Arg Cys 25 Trp Val His Met Leu Asp Asn Asn Thr Gly Ser Gly Asn Glu Thr Gly 40 Ile Leu Ser Glu Asp Ala Leu Leu Arg Ile Ser Ile Pro Leu Asp Ser 55 Asn Leu Arg Pro Glu Lys Cys Arg Arg Phe Val His Pro Gln Trp Gln 70 Leu Leu His Leu Asn Gly Thr Ile His Ser Thr Ser Glu Ala Asp Thr 85 90 Glu Pro Cys Val Asp Gly Trp Val Tyr Asp Gln Ser Tyr Phe Pro Ser 100 105 Thr Ile Val Thr Lys Trp Asp Leu Val Cys Asp Tyr Gln Ser Leu Lys 120 125 Ser Val Val Gln Phe Leu Leu Leu Thr Gly Met Leu Val Gly Gly Ile 135 140 Ile Gly Gly His Val Ser Asp Arg Trp Leu Val Glu Ser Ala Arg Trp 150 155 Leu Ile Ile Thr Asn Lys Leu Asp Glu Gly Leu Lys Ala Leu Arg Lys 165 170 Val Ala Arg Thr Asn Gly Ile Lys Asn Ala Glu Arg Asn Pro Glu His 185 Arg Gly Cys Lys Ile His His Ala Gly Gly Ala Gly Cys Ser Thr Asp 200 Gln Asn Tyr Cys Val * 210 213

<210> 1714 <211> 178 <212> PRT

<213> Homo sapiens

<400> 1714 Met Ala Ala Ser Trp Ser Leu Leu Val Thr Leu Arg Pro Leu Ala Gln 1 5 10 Ser Pro Leu Arg Gly Arg Cys Val Gly Cys Gly Ala Trp Ala Ala Ala 25 Leu Ala Pro Leu Ala Thr Ala Pro Gly Lys Pro Phe Trp Lys Ala Tyr 45 Thr Val Gln Thr Ser Glu Ser Met Thr Pro Thr Ala Thr Ser Glu Thr 55 Tyr Leu Lys Ala Leu Ala Val Cys His Gly Pro Leu Asp His Tyr Asp 70 75 Phe Leu Ile Lys Ala His Glu Leu Lys Asp Asp Glu His Gln Arg Arg 90 Val Ile Gln Cys Leu Gln Lys Leu His Glu Asp Leu Lys Gly Tyr Asn 105 Ile Glu Ala Glu Gly Leu Phe Phe Lys Ala Phe Phe Lys Glu Gln Thr 120 125 Ser Lys Gly Pro Val Cys Leu Trp Arg Cys Trp Tyr Arg Lys Asn Asn 130 135

<210> 1715 <211> 76 <212> PRT <213> Homo sapiens

<210> 1716 <211> 83 <212> PRT <213> Homo sapiens

<210> 1717 <211> 57 <212> PRT <213> Homo sapiens

<400> 1717 Met Ala Leu Phe Phe Leu Ala Leu Asn Phe Trp Lys Val Gly Met Ala

<210> 1718 <211> 76 <212> PRT <213> Homo sapiens

<210> 1719 <211> 71 <212> PRT <213> Homo sapiens

<210> 1720 <211> 101 <212> PRT <213> Homo sapiens

 Phe
 Pro
 Leu
 Pro
 His
 Pro
 Thr
 Leu
 Gly
 Pro
 Arg
 Arg
 His
 Ala
 Ser
 Leu

 Thr
 Gln
 Leu
 Gly
 Pro
 Ala
 Phe
 Trp
 Met
 Ala
 Trp
 Gly
 Arg
 Pro
 Trp
 Ala

 His
 Leu
 Gly
 Pro
 Gly
 Glu
 Pro
 Leu
 Gly
 Gln
 Leu
 Gly
 Gln
 Leu
 Gly
 Gln
 Fro
 Leu
 Gly
 Gln
 Leu
 Gly
 Gln
 Leu
 Gly
 Gln
 His
 Leu
 Glu
 Gly
 Ala
 Ala
 Ala
 Trp
 Leu
 Gln
 Fro
 Bo
 Fro
 Fro

<210> 1721 <211> 48 <212> PRT

<213> Homo sapiens

<210> 1722 <211> 70 <212> PRT <213> Homo sapiens

<210> 1723 <211> 54 <212> PRT <213> Homo sapiens

<400> 1723
Met Asp Leu Ile Phe Val Lys Val Leu Leu Ile Phe Ala Ala Ile Gln

1 5 10 15

Thr Leu Ser Lys Trp Gln Phe Ala Phe Thr Phe Ser Ile Gln Thr Val
20 25 30

Pro Ser Leu Val Ile Asn Leu Ser Trp Leu Leu Leu Asp Leu Lys Pro
35 40 45

Gly Thr His Ile Gln *
50 53

<210> 1724 <211> 60 <212> PRT <213> Homo sapiens

<210> 1725 <211> 63 <212> PRT <213> Homo sapiens

<210> 1726 <211> 57 <212> PRT <213> Homo sapiens

Ser Gln Arg Leu Lys Glu Glu * 50 55 56

<210> 1727

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1727

<210> 1728

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1728

Met Lys Met Glu Met Glu Thr Lys Arg Ser Trp Arg Pro Gln Ser His

1 5 10 15

Gly His Phe Thr Phe Gln Phe Leu Leu Ser Trp Thr Phe Glu Leu Ile

20 25 30

Leu Phe His Phe Val Pro Phe Phe Pro Tyr Leu Leu Phe *

35 40 45

<210> 1729

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1729

 Met Val
 Leu
 Leu
 Pro
 Leu
 Gln
 Cys
 Gly
 Leu
 Thr
 Lys
 Ala
 Ser
 Ser
 Cys

 Leu
 His
 Thr
 Leu
 Cys
 Ser
 Ser
 Ser
 Asp
 Gln
 Ile
 Gly
 Tyr
 Leu
 Pro
 Val

 Lys
 Asn
 Thr
 Asp
 Gln
 Leu
 Gln
 Met
 Glu
 Val
 Ala
 Glu
 Met
 Cys

 35
 40
 45
 48

<210> 1730

<211> 50

<212> PRT

<213> Homo sapiens

<210> 1731 <211> 227 <212> PRT <213> Homo sapiens

<400> 1731 Met Gly Cys Asp Gly Arg Val Ser Gly Leu Leu Arg Arg Asn Leu Gln Pro Thr Leu Thr Tyr Trp Ser Val Phe Phe Ser Phe Gly Leu Cys Ile 20 25 Ala Phe Leu Gly Pro Thr Leu Leu Asp Leu Arg Cys Gln Thr His Ser 40 Ser Leu Pro Gln Ile Ser Trp Val Phe Phe Ser Gln Gln Leu Cys Leu 55 Leu Leu Gly Ser Ala Leu Gly Gly Val Phe Lys Arg Thr Leu Ala Gln Ser Leu Trp Ala Leu Phe Thr Ser Ser Leu Ala Ile Ser Leu Val Phe 85 90 95 Ala Val Ile Pro Phe Cys Arg Asp Val Lys Val Leu Ala Ser Val Met 100 105 110 Ala Leu Ala Gly Leu Ala Met Gly Cys Ile Asp Thr Val Ala Asn Met 115 120 125 Gln Leu Val Arg Met Tyr Gln Lys Asp Ser Ala Val Phe Leu Gln Val 135 Leu His Phe Phe Val Gly Phe Gly Ala Leu Leu Ser Pro Leu Ile Ala 155 145 150 Asp Pro Phe Leu Ser Glu Ala Asn Cys Leu Pro Ala Asn Ser Thr Gly 165 170 175 Gln His His Leu Pro Arg Ala Thr Cys Ser Met Ser Pro Gly Cys Trp 185 190 Gly Gln His His Val Asp Ala Gln Ala Leu Val Gln Pro Asp Val Pro 200 205 Lys Ala Asp Ser Gln Gly Pro Gly Arg Glu Pro Glu Gly Pro Met Pro Ser Gly * 225 226

<210> 1732 <211> 102 <212> PRT <213> Homo sapiens

<400> 1732 Met Val Ser Lys Phe Leu Leu Ser His Leu Val Leu Ala Val Pro Leu 5 10 Arg Val Leu Leu Val Leu Trp Ala Leu Cys Val Gly Leu Ser Arg Val 20 25 Met Ile Gly Arg His His Val Thr Asp Val Leu Ser Gly Phe Val Ile 40 Gly Tyr Leu Gln Phe Arg Met Met Glu Lys Val Ser Met Gln Tyr Lys 55 60 Thr Cys Arg Met Leu Ile Phe Val Trp Arg Arg Ala Arg Arg Pro Thr 70 75 His Thr Phe Glu Gly Arg Leu Val Ser Lys Lys Gly Gln Asp Leu Ala 85 Arg Trp Leu Ser Leu * 100 101

<210> 1733 <211> 139 <212> PRT <213> Homo sapiens

<400> 1733

Met Lys Phe Thr Thr Leu Leu Phe Leu Ala Ala Val Ala Gly Ala Leu 10 Val Tyr Ala Glu Asp Ala Ser Ser Asp Ser Thr Gly Ala Asp Pro Ala 25 Gln Glu Ala Gly Thr Ser Lys Pro Asn Glu Glu Ile Ser Gly Pro Ala 35 40 Glu Pro Ala Ser Pro Pro Glu Thr Thr Thr Thr Ala Gln Glu Thr Ser 55 60 Ala Ala Ala Val Gln Gly Thr Ala Lys Val Thr Ser Ser Arg Gln Glu 75 Leu Asn Pro Leu Lys Ser Ile Val Glu Lys Ser Ile Leu Leu Thr Glu 90 Gln Ala Leu Ala Lys Ala Gly Lys Gly Met His Gly Gly Val Pro Gly 105 Gly Lys Gln Phe Ile Glu Asn Gly Ser Glu Phe Ala Gln Lys Leu Leu 115 120 Lys Lys Phe Ser Leu Leu Lys Pro Trp Ala 135

<210> 1734 <211> 60 <212> PRT <213> Homo sapiens

<400> 1734

Met Val Arg Ala Ser Phe Leu Cys Cys Val His Arg Thr Leu Gly Pro

1 5 10 15

Trp Asp Leu Ser His Met Glu Leu Gly Gln Leu Leu Gln Asn Ala Pro

20 25 30

Ser Ala His Arg Gly Cys Leu Gly Val Trp Lys Glu Val Val Pro Lys

35 40 45
Gln Leu Val Cys Trp Ile Leu Thr Phe Phe *
50 55 59

<210> 1735 <211> 73 <212> PRT <213> Homo sapiens

<210> 1736 <211> 65 <212> PRT <213> Homo sapiens

<210> 1737 <211> 47 <212> PRT <213> Homo sapiens

<210> 1738 <211> 107 <212> PRT <213> Homo sapiens

<400> 1738 Met Val Thr Gln Leu Thr Leu Glu Val Leu His Leu Ser Leu Val Val 5 10 Gly Gln Val Ser Asn Asn Leu Leu Leu His Ile Gly Pro Leu Ala Ser 20 25 Glu Gln Met Phe Tyr Ala Val Ala Thr Lys Ile Arg Asp Glu Asn Thr 40 Tyr Lys Ile Cys Thr Trp Leu Glu Ile Lys Val His His Val Leu Leu 55 His Ile Gln Gly Thr Leu Thr Cys Ser Tyr Leu Ser His Ser Glu Gln 75 Leu Val Phe Gln Ser Tyr Glu Tyr Val Asp Cys Arg Gly Asn Ala Ser 85 Val Pro His Gln Leu Thr Pro His Pro Pro * 100 105 106

<210> 1739 <211> 90 <212> PRT <213> Homo sapiens

<400> 1739

<210> 1740 <211> 57 <212> PRT <213> Homo sapiens

 $<\!\!400\!\!> 1740$ Met His Cys Val Leu Glu Ile Leu Val Ser Val Leu Gly Leu Thr His 1 5 10 15 His Leu Leu Arg Asp Arg Asp His Tyr Arg Leu Val Arg Leu Met

20 25 30 Gly Asp Val Gly Gly Glu Gly Glu Leu Lys Ala Met Trp Arg Val Cys 35 40 45 Leu Ser Val Cys Arg Val Asp Lys * 50 55 56

<210> 1741 <211> 49 <212> PRT <213> Homo sapiens

<210> 1742 <211> 87 <212> PRT <213> Homo sapiens

<210> 1743 <211> 49 <212> PRT <213> Homo sapiens

Gly Trp Leu Asn Glu Leu Lys Thr Ser Leu Lys Tyr Ile Arg Leu Arg
35 40 45 48

<210> 1744

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1744

<210> 1745

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1745

<210> 1746

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1746

 Met Val Ile Ser Ala Ala Val Leu Ser Ser Ile Leu Cys Val Phe Leu

 1
 5
 10
 15

 Ser Lys Leu Val Leu Met Asn Asp Glu Cys Leu Arg Leu Thr Phe Trp
 20
 25
 30

 Leu His Cys Asn Ala Lys His Tyr Arg Tyr Ser Met Leu Gly Phe Pro

35 40 45
Lys Leu Thr Ser Val
50 53

<210> 1747 <211> 49 <212> PRT <213> Homo sapiens

<210> 1748 <211> 196 <212> PRT <213> Homo sapiens

195

<400> 1748 Met Ala Met Leu Pro Phe Pro Ile Phe Leu Val Leu Leu Leu Arg Gly 10 . 15 1 5 Leu Val Leu Trp Thr Pro Ala Ser Ser Gly Thr Ile Met Pro Glu Glu 25 Arg Lys Thr Glu Ile Glu Arg Glu Thr Glu Thr Glu Ser Glu Thr Val 40 Ile Gly Thr Glu Lys Glu Asn Ala Pro Glu Arg Glu Arg Gly Ser Val 50 55 Ile Thr Val Leu His Gln Val Phe Ser Thr Ala Met Lys Asn Asp Thr 70 75 Asp Thr Gly Asn Met Gln Lys Glu Val Met Ser Val Thr Glu Gln Val 90 Glu Lys Lys Lys Asn Asp Ile Glu Lys Asp Asp Thr Gly Arg Lys Arg 105 Lys Pro Asp Ile Ser Leu Leu Glu Val Ile Val Asp Val Ala Met Lys 120 Val Lys Lys Glu Ile Val Thr Gly Asp Thr Asn Thr Lys Asn Leu Lys 135 140 Glu Ala Lys Lys Glu Lys Lys Arg Ala Val Ser Leu Pro Leu Asn Arg 155 160 150 Arg Ala Pro Lys Leu His Leu Gln Asn Arg His Gly Phe Gly Leu Leu 165 170 175 Cys Ile Leu Val Pro Glu Val Asp Thr Ile Asn Leu Val Ile Phe Leu 180 . 185 . 190 Asp Asn Val *

<210> 1749 <211> 46 <212> PRT <213> Homo sapiens <400> 1749 Met Leu Val Lys Val Val Tyr Val Met Gly Ala Ile Leu Lys Ile Phe 1 5 Leu Arg Glu Gly Asn Val Ile Asn Gln Arg Ser Gly Met Asp Ile Glu 20 25 Lys Tyr Ser Glu His Tyr Leu Ala Gln Gly Val Arg Trp * <210> 1750 <211> 82 <212> PRT <213> Homo sapiens <400> 1750 Met Glu Leu Val Arg Arg Leu Met Pro Leu Thr Leu Leu Ile Leu Ser 10 Cys Leu Ala Glu Leu Thr Met Ala Glu Ala Glu Gly Asn Ala Ser Cys 20 25 Thr Val Ser Leu Gly Gly Ala Asn Met Ala Glu Thr His Lys Ala Met 40 Ile Leu Gln Leu Asn Pro Ser Glu Asn Cys Thr Trp Thr Ile Glu Arg 50 55 . 60 Pro Glu Asn Lys Ser Ile Arg Ile Ile Phe Cys Tyr Val Gln Leu Gly 65 70 Ser Glu 82 <210> 1751 <211> 94 <212> PRT <213> Homo sapiens

<400> 1751 Met Gly Ser Val Phe Trp His Val Leu Phe Cys Ile Ser Gly Val Cys 10 Leu Trp Cys Ala His Arg Met Ala Ala Phe Leu Gln Gln Met Ala Val 25 Leu Leu Pro Val Asp Cys Glu Arg Pro Ala Ala Val His Trp Leu Ala 40 Leu Cys Gly Cys Cys Tyr Gly Gln Leu Val Trp Glu Ser Arg Thr Arg 55 60 Ser Cys Phe Trp Ser Leu Glu Cys Leu Cys Phe Gly Gln His Phe 70 75 Gly Ser Val Pro Ser Phe Phe Cys Ser Ser Val Trp Leu *

<210> 1752 <211> 143 <212> PRT <213> Homo sapiens

<400> 1752 Met Asp Thr Trp Leu Val Cys Trp Ala Ile Phe Ser Leu Leu Lys Ala 10 Gly Leu Thr Glu Pro Glu Val Thr Gln Thr Pro Ser His Gln Val Thr 20 25 Gln Met Gly Gln Glu Val Ile Leu Arg Cys Val Pro Ile Ser Asn His 40 Leu Tyr Phe Tyr Trp Tyr Arg Gln Ile Leu Gly Gln Lys Val Glu Phe 55 60 Leu Val Ser Phe Tyr Asn Asn Glu Ile Ser Glu Lys Ser Glu Ile Phe · 70 75 Asp Asp Gln Phe Ser Val Glu Arg Pro Asp Gly Ser Asn Phe Thr Leu 85 90 Lys Ile Arg Ser Thr Lys Leu Glu Asp Ser Ala Met Tyr Phe Cys Ala 105 100 Ser Ser Glu Arg Gly Ser Gly Ala Asn Val Leu Thr Phe Gly Ala Gly 120 125 Ser Arg Leu Thr Val Leu Glu Asp Leu Lys Asn Val Phe Pro Pro 135 140 143

<210> 1753 <211> 64 <212> PRT <213> Homo sapiens

<210> 1754 <211> 124 <212> PRT <213> Homo sapiens

<210> 1755 <211> 111 <212> PRT <213> Homo sapiens

<400> 1755

Met Glu Thr Gln Met Lys Gly Leu Lys Ala Lys Phe Arg Gln Ile

<210> 1756 <211> 74 <212> PRT <213> Homo sapiens

<210> 1757 <211> 50 <212> PRT <213> Homo sapiens

<400> 1757

 Met Glu Asn Val Asn Leu Lys Ala Ser Tyr Leu Gln Phe Ser Lys Leu

 1
 5
 10
 15

 Met Ala Gly Lys Gly Trp Ala Leu Phe Ile Ala Leu Thr Phe Ser Gln
 20
 25
 30

 Arg Leu Leu Pro Cys Leu Ala Ile Ile Glu Ile Ile Asn Val Gly Val
 35
 40
 45

 Glu *
 49

<210> 1758 <211> 123 <212> PRT <213> Homo sapiens

<400> 1758

Met Ala Trp Ile Pro Leu Phe Leu Gly Val Leu Ala Tyr Cys Thr Glu 1 5 10 Ser Val Ala Ser Tyr Glu Leu Phe Gln Pro Pro Ser Val Ser Val Ser 25 Pro Gly Gln Thr Ala Thr Phe Thr Cys Ser Gly Asp Asp Leu Gly Asn Lys Tyr Ile Cys Trp Tyr Leu Gln Lys Pro Gly Gln Pro Pro Val Val 50 55 Leu Met Tyr Gln Asp Asn Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe 70 75 80 Ser Gly Ser Asn Ser Gly Ser Thr Ala Thr Leu Thr Ile Ser Gly Thr 90 Gln Ala Thr Asp Glu Ala Leu Tyr Phe Cys Gln Ala Trp Asp Thr Asn 105 Gly Ala Val Phe Gly Gly Gly Thr Gln Leu Thr 120

<210> 1759 <211> 75 <212> PRT <213> Homo sapiens

Pro Cys Leu Tyr Leu Glu Gly Asn Pro Thr * 65 70 74

<210> 1760 <211> 122 <212> PRT <213> Homo sapiens

<400> 1760 Met Arg Leu Pro Asp Val Gln Leu Trp Leu Val Leu Leu Trp Ala Leu 10 Val Arg Ala Gln Gly Thr Gly Ser Val Cys Pro Ser Cys Gly Gly Ser 25 Lys Leu Ala Pro Gln Ala Glu Arg Ala Leu Val Leu Glu Leu Ala Lys 40 Gln Gln Ile Leu Asp Gly Leu His Leu Thr Ser Arg Pro Arg Ile Thr 55 His Pro Pro Pro Gln Ala Ala Leu Thr Arg Ala Leu Arg Arg Leu Gln 70 75 . Pro Gly Ser Val Ala Pro Gly Asn Gly Glu Glu Val Ile Ser Phe Ala 90 Thr Val Thr Asp Ser Thr Ser Ala Tyr Ser Ser Leu Leu Thr Phe His 105 Leu Ser Thr Pro Arg Ser His His Leu Tyr

<210> 1761 <211> 123 <212> PRT <213> Homo sapiens

<400> 1761 Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala Val Leu Leu 10 Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp Glu Ser 25 Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val Lys Asp His 40 Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe Leu Asp Ser Glu 55 Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu Asp Ser Leu Lys 70 75 Ser Gln Glu Gly Glu Ser Val Thr Glu Asp Ile Ser Phe Leu Glu Ser 85 90 Pro Asn Pro Glu Asn Lys Asp Tyr Glu Glu Pro Lys Lys Val Arg Lys 105 100 Pro Gly Ser Leu Asp Ile Phe Leu Ala Phe * 120 122

<210> 1762 <211> 145

<212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(145) <223> Xaa = any amino acid or nothing

<400> 1762 Met Ala Leu Ala Ala Leu Met Ile Ala Leu Gly Ser Leu Gly Leu His 5 10 Thr Trp Gln Ala Gln Ala Val Pro Thr Ile Leu Pro Leu Gly Leu Ala 20 25 Pro Asp Thr Phe Asp Asp Thr Tyr Val Gly Cys Ala Glu Glu Met Glu Glu Lys Ala Ala Pro Leu Leu Lys Glu Glu Met Ala His His Ala Leu Leu Arg Glu Ser Trp Glu Ala Ala Gln Glu Thr Trp Glu Asp Lys Arg 70 Arg Gly Leu Thr Leu Pro Pro Gly Phe Lys Ala Gln Asn Gly Ile Ala 85 90 Ile Met Val Tyr Thr Asn Ser Ser Asn Thr Leu Tyr Trp Glu Leu Asn 100 105 Xaa Ala Val Arg Thr Gly Gly Gly Ser Arg Glu Leu Tyr Met Arg His 120 125 Phe Pro Phe Lys Ala Leu His Phe Tyr Leu Ile Arg Ala Leu Gln Leu Leu 145

<210> 1763 <211> 257 <212> PRT <213> Homo sapiens

<400> 1763 Met Lys Arg Glu Arg Gly Ala Leu Ser Arg Ala Ser Arg Ala Leu Arg 1 5 10 Leu Ala Pro Phe Val Tyr Leu Leu Leu Ile Gln Thr Asp Pro Leu Glu 25 Gly Val Asn Ile Thr Ser Pro Val Arg Leu Ile His Gly Thr Val Gly Lys Ser Ala Leu Leu Ser Val Gln Tyr Ser Ser Thr Ser Ser Asp Arg 55 Pro Val Val Lys Trp Gln Leu Lys Arg Asp Lys Pro Val Thr Val Val 70 75 Gln Ser Ile Gly Thr Glu Val Ile Gly Thr Leu Arg Pro Asp Tyr Arg 85 90 Asp Arg Ile Arg Leu Phe Glu Asn Gly Ser Leu Leu Leu Ser Asp Leu 100 105 Gln Leu Ala Asp Glu Gly Thr Tyr Glu Val Glu Ile Ser Ile Thr Asp 120 125 Asp Thr Phe Thr Gly Glu Lys Thr Ile Asn Leu Thr Val Asp Val Pro 135 140 Ile Ser Arg Pro Gln Val Leu Gly Ala Ser Thr Thr Val Leu Glu Leu 150 155 160

 Ser
 Glu
 Ala
 Phe
 Thr
 Leu
 Asn
 Cys
 Ser
 His
 Glu
 Asn
 Gly
 Thr
 Lys
 Pro
 175

 Ser
 Tyr
 Thr
 Trp
 Leu
 Lys
 Asp
 Gly
 Lys
 Pro
 Leu
 Leu
 Asp
 Ser
 Arg

 Met
 Leu
 Leu
 Ser
 Pro
 Asp
 Gln
 Lys
 Val
 Leu
 Thr
 Arg
 Val
 Leu

 Met
 Glu
 Asp
 Asp
 Leu
 Tyr
 Ser
 Cys
 Val
 Val
 Glu
 Asn
 Pro
 Ile
 Asn

 210
 Tyr
 Arg
 Thr
 Leu
 Pro
 Cys
 Lys
 Val
 Val
 Glu
 Asn
 Pro
 Ile
 Asn

 210
 Arg
 Arg
 Leu
 Pro
 Cys
 Lys
 Ile
 Thr
 Glu
 Tyr
 Arg
 Lys
 Ser
 Ser

 <t

<210> 1764

<211> 166

<212> PRT

<213> Homo sapiens

<221> misc feature

<222> (1)...(166)

<223> Xaa = any amino acid or nothing

<400> 1764

Met Ala Leu Lys Val Leu Leu Glu Gln Glu Lys Thr Phe Phe Thr Leu 5 1.0 Leu Val Leu Leu Gly Tyr Leu Ser Cys Lys Val Thr Cys Glu Ser Gly 25 Asp Cys Arg Gln Glu Phe Arg Asp Arg Ser Gly Asn Cys Val Pro 40 Cys Asn Gln Cys Gly Pro Gly Met Glu Leu Ser Lys Glu Cys Gly Phe 55 60 Gly Tyr Gly Glu Asp Ala Gln Cys Val Thr Cys Arg Leu His Arg Phe 70 75 Lys Glu Asp Trp Gly Phe Gln Lys Cys Lys Pro Cys Leu Asp Cys Ala 90 Val Val Asn Arg Phe Gln Lys Ala Asn Cys Ser Ala Thr Ser Asp Ala 100 105 110 Ile Cys Gly Asp Cys Leu Pro Gly Phe Tyr Arg Lys Thr Lys Leu Val 115 120 1.25 Gly Phe Gln Asp Met Glu Trp Trp Xaa Ala Leu Val Gly Arg Thr Pro 130 135 140 Phe Leu Pro Ser Leu Tyr Gly Asn Pro Ala Leu Gly Cys Gln Pro Arg 150 155 Val Gln Thr Phe Gly Glu

<210> 1765

<211> 90

<212> PRT

<213> Homo sapiens

Leu Ala Val Met Pro Asn Tyr Leu Tyr Lys 85 90

> <210> 1766 <211> 57 <212> PRT

<213> Homo sapiens

<210> 1767 <211> 63 <212> PRT <213> Homo sapiens

<210> 1768 <211> 174 <212> PRT <213> Homo sapiens

<400> 1768

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile 10 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His 25 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys 40 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr 85 90 Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly 100 105 Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys 115 120 Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn 135 140 Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys 150 155 Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Asp Val * 170

<210> 1769 <211> 78 <212> PRT

<213> Homo sapiens

<400> 1769

 Met
 Leu
 Cys
 Leu
 Cys
 Arg
 Phe
 Ala
 Cys
 Ser
 Arg
 Phe
 Thr
 Ala
 Met

 1
 5
 5
 10
 10
 15
 15

 Gly
 Leu
 Phe
 Cys
 Leu
 Ala
 Ser
 Leu
 Thr
 Leu
 His
 His
 Ile
 Phe
 Lys
 Val

 His
 Pro
 Ser
 Cys
 Ser
 Val
 Ser
 Val
 Pro
 Pro
 Pro
 Gly
 Phe
 Ser
 Leu
 Leu
 Ser

 Ser
 Ala
 Arg
 Cys
 Met
 Arg
 Pro
 Arg
 Cys
 Ala
 His
 Leu
 Phe
 Ala
 Leu
 Phe
 Ala
 Leu
 Phe
 Ala
 Leu
 *
 Fe
 Fe

<210> 1770 <211> 149 <212> PRT <213> Homo sapiens

<400> 1770

<210> 1771 <211> 76 <212> PRT <213> Homo sapiens

<400> 1771

<210> 1772 <211> 128 <212> PRT <213> Homo sapiens

<400> 1772 Met Gly Ser Thr Lys His Trp Gly Glu Trp Leu Leu Asn Leu Lys Val 15 1 5 10 Ala Pro Ala Gly Val Phe Gly Val Ala Phe Leu Ala Arg Val Ala Leu 25 Val Phe Tyr Gly Val Phe Gln Asp Arg Thr Leu His Val Arg Tyr Thr 40 Asp Ile Asp Tyr Gln Val Phe Thr Asp Ala Ala Arg Phe Val Thr Glu 55 Gly Arg Ser Pro Tyr Leu Arg Ala Thr Tyr Arg Tyr Thr Pro Leu Leu 70 75 Gly Trp Leu Leu Thr Pro Asn Ile Tyr Leu Ser Glu Leu Phe Gly Lys 85 90 Phe Leu Phe Ile Ser Cys Asp Leu Leu Thr Ala Phe Leu Leu Tyr Arg 105 Leu Leu Leu Lys Gly Leu Gly Arg Arg Gln Ala Cys Gly Tyr Cys 120 125

<210> 1773 <211> 614 <212> PRT <213> Homo sapiens

<400> 1773 Met Gly Ala Leu Arg Pro Thr Leu Leu Pro Pro Ser Leu Pro Leu Leu 5 Leu Leu Met Leu Gly Met Gly Cys Trp Ala Arg Glu Val Leu Val 20 25 Pro Glu Gly Pro Leu Tyr Arg Val Ala Gly Thr Ala Val Ser Ile Ser 40 Cys Asn Val Thr Gly Tyr Glu Gly Pro Ala Gln Gln Asn Phe Glu Trp 55 60 Phe Leu Tyr Arg Pro Glu Ala Pro Asp Thr Ala Leu Gly Ile Val Ser 70 75 Thr Lys Asp Thr Gln Phe Ser Tyr Ala Val Phe Lys Ser Arg Val Val Ala Gly Glu Val Gln Val Gln Arg Leu Gln Gly Asp Ala Val Val Leu 100 105 Lys Ile Ala Arg Leu Gln Ala Gln Asp Ala Gly Ile Tyr Glu Cys His 120 125 Thr Pro Ser Thr Asp Thr Arg Tyr Leu Gly Ser Tyr Ser Gly Lys Val 140 135 Glu Leu Arg Val Leu Pro Asp Val Leu Gln Val Ser Ala Ala Pro Pro 150 155 Gly Pro Arg Gly Arg Gln Ala Pro Thr Ser Pro Pro Arg Met Thr Val 165 170 His Glu Gly Gln Glu Leu Ala Leu Gly Cys Leu Ala Arg Thr Ser Thr 180 185 190 Gln Lys His Thr His Leu Ala Val Ser Phe Gly Arg Ser Val Pro Glu 200 Ala Pro Val Gly Arg Ser Thr Leu Gln Glu Val Val Gly Ile Arg Ser 215 Asp Leu Ala Val Glu Ala Gly Ala Pro Tyr Ala Glu Arg Leu Ala Ala Gly Glu Leu Arg Leu Gly Lys Glu Gly Thr Asp Arg Tyr Arg Met Val 245 250 Val Gly Gly Ala Gln Ala Gly Asp Ala Gly Thr Tyr His Cys Thr Ala 265 Ala Glu Trp Ile Gln Asp Pro Asp Gly Ser Trp Ala Gln Ile Ala Glu 280 285 Lys Arg Ala Val Leu Ala His Val Asp Val Gln Thr Leu Ser Ser Gln 295 300 Leu Ala Val Thr Val Gly Pro Gly Glu Arg Arg Ile Gly Pro Gly Glu 315 Pro Leu Glu Leu Leu Cys Asn Val Ser Gly Ala Leu Pro Pro Ala Gly 325 330 Arg His Ala Ala Tyr Ser Val Gly Trp Glu Met Ala Pro Ala Gly Ala 345 340 Pro Gly Pro Gly Arg Leu Val Ala Gln Leu Asp Thr Glu Gly Val Gly 360 Ser Leu Gly Pro Gly Tyr Glu Gly Arg His Ile Ala Met Glu Lys Val

370 375 Ala Ser Arg Thr Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp 390 395 Ala Gly Thr Tyr Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly 405 410 Thr Arg Leu Arg Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val 420 425 His Val Arg Glu Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala 440 Gly Gly Thr Val Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile 455 460 Ser Val Arg Gly Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp 470 475 Val Glu Arg Pro Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu 490 Val Gly Gly Val Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro 500 505 Gly Gly Gly Pro Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg 520 525 Leu Arg Leu His Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys 530 535 540 Ala Pro Ser Ala Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala 545 550 555 Gly Ser Ala Arg Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala 565 . 570 Leu Asp Thr Leu Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu 585 Val Thr Gly Ala Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys 595 600 _. 605 Arg Leu Arg Lys Arg * 610 613

<210> 1774 <211> 156 <212> PRT <213> Homo sapiens

<400> 1774

Met Glu Ala Leu Thr Leu Trp Leu Leu Pro Trp Ile Cys Gln Cys Val 1 , 5 10 Ser Val Arg Ala Asp Ser Ile Ile His Ile Gly Ala Ile Phe Glu Glu Asn Ala Ala Lys Asp Asp Arg Val Phe Gln Leu Ala Val Ser Asp Leu 40 Ser Leu Asn Asp Asp Ile Leu Gln Ser Glu Lys Ile Thr Tyr Ser Ile 55 Lys Val Ile Glu Ala Asn Asn Pro Phe Gln Ala Val Gln Glu Ala Cys 75 70 Asp Leu Met Thr Gln Gly Ile Leu Ala Leu Val Thr Ser Thr Gly Cys 90 Ala Ser Ala Asn Ala Leu Gln Ser Leu Thr Asp Ala Met His Ile Pro 100 . 105 His Leu Phe Val Gln Arg Asn Pro Gly Gly Ser Pro Arg Thr Ala Cys 120 125 His Leu Asn Pro Ser Pro Asp Gly Glu Ala Tyr Thr Leu Ala Ser Arg 130 135

Pro Pro Val Arg Leu Asn Asp Val Met Leu Arg Leu 145 150 155

<210> 1775 <211> 896 <212> PRT <213> Homo sapiens

<400> 1775 Met Gln Lys Ala Ser Val Leu Leu Phe Leu Ala Trp Val Cys Phe Leu 5 Phe Tyr Ala Gly Ile Ala Leu Phe Thr Ser Gly Phe Leu Leu Thr Arg 20 25 Leu Glu Leu Thr Asn His Ser Ser Cys Gln Glu Pro Pro Gly Pro Gly 40 , Ser Leu Pro Trp Gly Ser Gln Gly Lys Pro Gly Ala Cys Trp Met Ala 55 Ser Arg Phe Ser Arg Val Val Leu Val Leu Ile Asp Ala Leu Arg Phe 70 75 Asp Phe Ala Gln Pro Gln His Ser His Val Pro Arg Glu Pro Pro Val 90 Ser Leu Pro Phe Leu Gly Lys Leu Ser Ser Leu Gln Arg Ile Leu Glu 100 105 Ile Gln Pro His His Ala Arg Leu Tyr Arg Ser Gln Val Asp Pro Pro 120 Thr Thr Thr Met Gln Arg Leu Lys Ala Leu Thr Thr Gly Ser Leu Pro 140 135 Thr Phe Ile Asp Ala Gly Ser Asn Phe Ala Ser His Ala Ile Val Glu 150 155 Asp Asn Leu Ile Lys Gln Leu Thr Ser Ala Gly Arg Arg Val Val Phe 165 170 Met Gly Asp Asp Thr Trp Lys Asp Leu Phe Pro Gly Ala Phe Ser Lys 180 185 Ala Phe Phe Phe Pro Ser Phe Asn Val Arg Asp Leu Asp Thr Val Asp 200 205 Asn Gly Ile Leu Glu His Leu Tyr Pro Thr Met Asp Ser Gly Glu Trp 215 220 Asp Val Leu Ile Ala His Phe Leu Gly Val Asp His Cys Gly His Lys 230 235 His Gly Pro His His Pro Glu Met Ala Lys Lys Leu Ser Gln Met Asp 245 250 Gln Val Ile Gln Gly Leu Val Glu Arg Leu Glu Asn Asp Thr Leu Leu 265 Val Val Ala Gly Asp His Gly Met Thr Thr Asn Gly Asp His Gly Gly 280 285 Asp Ser Glu Leu Glu Val Ser Ala Ala Leu Phe Leu Tyr Ser Pro Thr 295 300 Ala Val Phe Pro Ser Thr Pro Pro Glu Glu Pro Glu Val Ile Pro Gln 310 315 Val Ser Leu Val Pro Thr Leu Ala Leu Leu Gly Leu Pro Ile Pro 325 330 Phe Gly Asn Ile Gly Glu Val Met Ala Glu Leu Phe Ser Gly Gly Glu 345 Asp Ser Gln Pro His Ser Ser Ala Leu Ala Gln Ala Ser Ala Leu His 360 365 Leu Asn Ala Gln Gln Val Ser Arg Phe Phe His Thr Tyr Ser Ala Ala

| | 370 | | | | | 375 | | | | | 380 | | • | | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Thr 385 | Gln | Asp | Leu | Gln | Ala 390 | Lys | Glu | Leu | His | Gln 395 | Leu | Gln | Asn | Leu | Phe 400 |
| | | | Ser | 405 | | | | | 410 | | | | | 415 | _ |
| Ala | Glu | Ala | Thr 420 | Leu | Pro | Thr | Val | Ile 425 | Ala | Glu | Leu | Gln | Gln 430 | Phe | Leu |
| Arg | Gly | Ala 435 | Arg | Ala | Met | Cys | Ile 440 | Glu | Ser | Trp | Ala | Arg 445 | Phe | Ser | Leu |
| Val | Arg 450 | Met | Ala | Gly | Gly | Thr 455 | Ala | Leu | Leu | Ala | Ala 460 | Ser | Суѕ | Phe | Ile |
| Cys 465 | Leu | Leu | Ala | Ser | Gln 470 | Trp | Ala | Ile | Ser | Pro 475 | Gly | Phe | Pro | Phe | Cys 480 |
| Pro | Leu | Leu | Leu | Thr 485 | Pro | Val | Ala | Trp | Gly 490 | Lėu | Val | Gly | Ala | Ile 495 | Ala |
| | | | Leu 500 | | | | | 505 | | | | | 510 | | |
| | | 515 | Val | | | | 520 | | | | | 525 | | _ | _ |
| | 530 | | Gly | | | 535 | | | | | 540 | | | | |
| 545 | | | Pro | | 550 | | | | | 555 | _ | | | | 560 |
| | | | Ser | 565 | | | | | 570 | | | | | 575 | |
| | | | Phe 580 | | | | | 585 | | | | | 590 | | _ |
| | | 595 | Pro | | | | 600 | | | | | 605 | _ | | |
| | 610 | | Asn | | | 615 | | | | | 620 | | | | |
| 625 | | | Leu | | 630 | | | | | 635 | | | | | 640 |
| | | | Glu | 645 | | | | | 650 | | | _ | | 655 | |
| | | | Met 660 | | | | | 665 | | | | | 670 | | |
| | | 675 | Ala | | | | 680 | | | | | 685 | | | |
| | 690 | | Gly | | | 695 | | | | | 700 | | | | |
| 705 | | | Leu | | 710 | | | | | 715 | | | _ | | 720 |
| | | | Gly | 725 | | | | | 730 | | | _ | | 735 | |
| | _ | | Ser 740 | | | | | 745 | | | | • | 750 | | |
| | | 755 | Ala | | | | 760 | | | | | 765 | | | - |
| | 770 | | Gly | | | 775 | | | | | 780 | | | | |
| 785 | | | Thr | | 790 | | | | | 795 | | | | | 800 |
| | | | Met | 805 | | | | | 810 | | | | | 815 | |
| | | | Pro 820 | | | | | 825 | - | | | _ | 830 | | _ |
| Ser | Ala | Ala 835 | Met | Val | Thr | Ala | Leu 840 | Thr | Leu | Leu | Ala | Phe 845 | Pro | Leu | Leu |

<210> 1776 <211> 178 <212> PRT <213> Homo sapiens

<400> 1776

Met Trp Ala Cys Trp Cys Val Leu Gly Thr Pro Gly Val Ala Met Val 10 Leu Leu His Thr Thr Ile Ser Phe Cys Val Ala Gln Phe Arg Ser Gln 20 25 Leu Leu Thr Trp Leu Cys Ser Leu Leu Leu Ser Thr Leu Arg Leu 40 Gln Gly Val Glu Glu Val Lys Arg Arg Trp Tyr Lys Thr Glu Asn Glu 55 Tyr Tyr Leu Leu Gln Phe Thr Leu Thr Val Arg Cys Leu Tyr Tyr Thr 70 75 Ser Phe Ser Leu Glu Leu Cys Trp Gln Gln Leu Pro Ala Ala Ser Thr 85 90 Ser Tyr Ser Phe Pro Trp Met Leu Ala Tyr Val Phe Tyr Tyr Pro Val 100 105 Leu His Asn Gly Pro Ile Leu Ser Phe Ser Glu Phe Ile Lys Gln Arg 115 120 125 Ser Gln Trp Ser Asn Arg Glu Phe Gly Met Glu Val Glu Ser Lys Gly 130 135 140 Pro Gly Ala His Pro Pro Gly Phe Glu Ser Leu Leu Cys Phe Gly Leu 150 155 160 Arg Val Leu Ala Glu Leu Leu Thr Leu Leu Met Pro Gln Ser Ser Tyr 170 Gln * 177

<210> 1777 <211> 59 <212> PRT <213> Homo sapiens

<400> 1777

 Met
 Pro
 Thr
 Tyr
 Leu
 Ala
 Asn
 Leu
 Arg
 Pro
 Gly
 Leu
 Gln
 Pro
 Phe

 1
 5
 10
 15
 15
 15
 15
 16
 15
 15
 16
 15
 16
 15
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16

50 55 59

<210> 1778 <211> 137

<212> PRT

<213> Homo sapiens

<400> 1778

 Met
 Val
 Ala
 Pro
 Gly
 Leu
 Val
 Leu
 Gly
 Leu
 Gly
 Leu
 Hee
 Gly
 Leu
 Val
 Leu
 Ile
 Leu
 Ile
 Leu
 Ile
 Ile</th

135 137

<210> 1779

<211> 65

<212> PRT

<213> Homo sapiens

<400> 1779

 Met Lys Val
 Phe Phe Leu Asp Glu Ser Trp Pro Gln Trp Arg Phe Ala

 1
 5
 10
 15

 Ala Gly Leu Leu Ala Leu Ser Phe Gly Gly Pro Ala Trp Lys Phe Leu
 30

 Ser Val Gln Arg Val Ile Pro Trp Leu Trp Ala Ala Lys Glu Lys Pro
 30

 Leu Gly Pro Leu Ala Thr Pro Pro Arg Leu Asn Pro Lys Val Gly Val
 55

<210> 1780

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1780

<210> 1781 <211> 109 <212> PRT <213> Homo sapiens

Val Glu Ala Gln Asn Gly Ser Glu Ser Glu Val Phe Val Gly Lys Tyr 35 40 45 Glu Thr Leu Val Phe Tyr Trp Pro Ser Leu Leu Cys Leu Ala Phe Leu

50 55 60

Leu Gly Arg Phe Leu His Met Phe Val Lys Ala Leu Arg Val His Leu
65 70 75 80

Gly Trp Glu Leu Gln Val Glu Glu Lys Ser Val Leu Glu Val His Gln
85 90 95
Gly Glu His Val Lys Gln Leu Leu Arg Ile Pro Arg Pro

Gly Glu His Val Lys Gln Leu Leu Arg Ile Pro Arg Pro 100 105 109

<210> 1782 <211> 58 <212> PRT <213> Homo sapiens

<210> 1783 <211> 102 <212> PRT <213> Homo sapiens

<400> 1783 Met Leu Ile Pro His Gln Leu Pro Leu Cys Ser Pro Trp Leu Val Gln 10 Ala Met Leu Thr Ile Glu Val Pro Trp Leu Leu Gly Leu Ala His Tyr 20 25 Arg Leu Gly Trp His Ala Leu Glu Gly Ile Phe Trp Trp Gly Ala Ser 40 Val Phe His Ala Leu Gln Ala Met Leu Val Arg Lys Trp Pro Leu Gly 55 60 Leu Val Glu Phe Thr Gly Thr Cys Gly Ile Leu Val Glu Val Ile Gly 70 75 Leu Trp Trp Gly Glu Gly Ser Thr Gly Asn Arg Trp Met Gly Leu Asn 85 90 Ser Thr Gly Gly Gln * 100 101

<210> 1784 <211> 243 <212> PRT <213> Homo sapiens

242

<400> 1784 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val 1 5 10 Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro 25 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu 40 Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu 55 Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly 70 75 Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn 100 105 Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln 120 125 Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu 135 140 Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His 150 155 160 Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg 170 Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu 185 Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr 200 205 His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg 215 220 Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg 230 235 Gln Leu *

<210> 1785 <211> 158 <212> PRT <213> Homo sapiens

<400> 1785 Met Lys Ala Leu Leu Leu Val Leu Pro Trp Leu Ser Pro Ala Asn 1 5 Tyr Ile Asp Asn Val Gly Asn Leu His Phe Leu Tyr Ser Glu Leu Cys 25 Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys Arg Arg Ser 40 Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr Ala Thr Ala Pro 55 60 Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser Leu Met Thr Asp Glu 70 75 Pro Gly Leu Asp Asn Pro Ala Tyr Val Ser Ser Ala Glu Asp Gly Gln 85 90 Pro Ala Ile Ser Pro Val Asp Ser Gly Arg Ser Asn Arg Thr Arg Ala 105 100 Arg Pro Phe Glu Arg Ser Thr Ile Ile Ser Arg Ser Phe Lys Lys Ile 120 Asn Arg Ala Leu Ser Val Leu Arg Arg Thr Lys Ser Gly Ser Ala Val 130 135 140 Ala Asn His Ala Asp Gln Gly Arg Glu Asn Ser Glu Asn Thr 150 155

<210> 1786 <211> 142 <212> PRT <213> Homo sapiens

<400> 1786

Met Glu Ser Ala Val Arg Val Glu Ser Gly Val Leu Val Gly Val Val 10 Cys Leu Leu Leu Ala Cys Pro Ala Thr Ala Thr Gly Pro Glu Val Ala 25 Gln Pro Glu Val Asp Thr Thr Leu Gly Arg Val Arg Gly Arg Gln Val 40 Gly Val Lys Gly Thr Asp Arg Leu Val Asn Val Phe Leu Gly Ile Pro 55 60 Phe Ala Gln Pro Pro Leu Gly Pro Asp Arg Phe Ser Ala Pro His Pro 70 75 Ala Gln Pro Trp Glu Gly Val Arg Asp Ala Ser Thr Ala Pro Pro Met 90 Cys Leu Gln Asp Val Glu Ser Met Asn Ser Ser Arg Phe Val Leu Asn 105 Gly Lys Gln Gln Ile Phe Ser Val Ser Glu Asp Cys Leu Val Leu Asn 115 120 125 Val Tyr Ser Pro Ala Glu Val Pro Ala Gly Ser Gly Arg Pro 140 142 130 135

<210> 1787

```
<211> 120
    <212> PRT
    <213> Homo sapiens
    <221> misc feature
    <222> (1) ... (120)
    <223> Xaa = any amino acid or nothing
    <400> 1787
Met Ala Leu Thr Gly Tyr Ser Trp Leu Leu Leu Ser Ala Thr Phe Leu
                                   10
Asn Val Gly Ala Glu Ile Ser Ile Thr Leu Glu Pro Ala Gln Pro Ser
                               25
Glu Gly Asp Asn Val Thr Leu Val Val His Gly Leu Ser Gly Glu Leu
                           40
Leu Ala Tyr Ser Trp Tyr Ala Gly Pro Thr Leu Ser Val Ser Tyr Leu
                       55
                                          60
Val Ala Ser Tyr Ile Val Ser Thr Gly Asp Glu Thr Pro Gly Pro Ala
                    70
His Thr Xaa Arg Glu Ala Val Arg Pro Asp Gly Ser Leu Asp Ile Gln
Gly Ile Leu Pro Arg His Ser Ser Thr Tyr Ile Leu Gln Thr Phe Asn
          100
                    105
Arg Gln Leu Gln Thr Glu Val Gly
       115
    <210> 1788
    <211> 68
    <212> PRT
    <213> Homo sapiens
    <400> 1788
Met Ser Trp Leu Ala Asn Gly Val Cys Leu Tyr Glu Tyr Leu Phe Phe
         5
                                   10
Arg Cys Gly Phe Leu Ile Leu Gln Pro Cys Ser Phe Asp Ala Ser Leu
                                25
Thr Asp Glu Glu Ser Arg Lys Asn Trp Glu Glu Phe Gly Asn Pro Asp
                            40
Gly Pro Gln Gly Val Val Asn Asp Asp Phe Lys Ile Leu Ala Ile Trp
    50
Tyr Ile Leu *
65 67
    <210> 1789
    <211> 133
    <212> PRT
    <213> Homo sapiens
    <400> 1789
Met Ala Val Val Ile Arg Leu Leu Gly Leu Pro Phe Ile Ala Gly Pro
```

Val Asp Ile Arg His Phe Phe Thr Gly Leu Thr Ile Pro Asp Gly Gly 20 25 Val His Ile Ile Gly Glu Ile Gly Glu Ala Phe Ile Ile Phe Ala 40 Thr Asp Glu Asp Ala Arg Arg Ala Ile Ser Arg Ser Gly Gly Phe Ile 55 Lys Asp Ser Ser Val Glu Leu Phe Leu Ser Ser Lys Ala Glu Met Gln 70 75 Lys Thr Ile Glu Met Lys Arg Thr Asp Arg Val Gly Arg Gly Arg Pro 85 90 Gly Ser Gly Thr Ser Gly Val Asp Ser Leu Ser Asn Phe Ile Glu Ser 105 Val Lys Glu Glu Ala Ser Asn Ser Gly Tyr Gly Ser Ser Ile Asn Gln 115 120 Asp Ala Gly Phe His 130

<210> 1790 <211> 82 <212> PRT <213> Homo sapiens

<400> 1790

<210> 1791 <211> 50 <212> PRT <213> Homo sapiens

<400> 1791

<210> 1792
<211> 166
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1)...(166)
<223> Xaa = any amino acid or nothing

<400> 1792 Met Leu Leu Trp Leu Leu Leu Ile Leu Thr Pro Gly Arg Glu Gln 5 10 Ser Gly Val Ala Pro Lys Ala Val Leu Leu Leu Asp Pro Pro Trp Ser 20 25 Thr Ala Phe Lys Gly Glu Lys Val Ala Leu Ile Cys Ser Ser Ile Ser 40 His Ser Leu Ala Gln Gly Asp Thr Tyr Trp Tyr His Asp Glu Lys Leu 60 Leu Lys Ile Lys His Asp Lys Ile Gln Ile Thr Glu Pro Gly Asn Tyr Gln Cys Lys Thr Arg Gly Ser Ser Leu Ser Asp Ala Val His Val Glu Phe Ser Pro Asp Trp Leu Ile Leu Gln Ala Leu His Pro Val Phe Glu 105 100 Gly Asp Asn Val Ile Leu Arg Cys Gln Gly Lys Asp Asn Lys Asn Thr 120 125 His His Lys Val Tyr Tyr Lys Asp Gly Lys Gln Xaa Ser Asn Ser Tyr 135 140 Asn Leu Glu Lys Asn Thr Val Asp Ser Val Ser Arg Asp Asn Ser Pro 150 Tyr Tyr Cys Ala Gly * 165

<210> 1793 <211> 146 <212> PRT <213> Homo sapiens

<400> 1793 Met Ala Thr Ala Ala Gln Gly Pro Leu Ser Leu Leu Trp Gly Trp Leu 1 5 10 15 Trp Ser Glu Arg Phe Trp Leu Pro Glu Asn Val Ser Trp Ala Asp Leu 25 Glu Gly Pro Ala Asp Gly Tyr Gly Tyr Pro Arg Gly Arg His Ile Leu 40 Ser Val Phe Pro Leu Ala Ala Gly Ile Phe Phe Val Arg Leu Leu Phe 55 Glu Arg Phe Ile Ala Lys Pro Cys Ala Leu Arg Ile Gly Ile Glu Asp 70 75 Ser Gly Pro Tyr Gln Ala Gln Pro Asn Ala Ile Leu Glu Lys Val Phe 85 90 Ile Ser Ile Thr Lys Tyr Pro Asp Lys Lys Arg Leu Glu Gly Leu Ser 105 Lys Gln Leu Asp Trp Asn Val Arg Lys Ile Gln Cys Trp Phe Arg His 120

Arg Arg Asn Gln Asp Lys Pro Pro Thr Leu Thr Lys Phe Cys Glu Ser 130 135 140

Met *

<210> 1794 <211> 151 <212> PRT <213> Homo sapiens

<400> 1794 Met Glu Arg Arg Leu Leu Gly Gly Met Ala Leu Leu Leu Gln 10 Ala Leu Pro Ser Pro Leu Ser Ala Arg Ala Glu Pro Pro Gln Asp Lys Glu Ala Cys Val Gly Thr Asn Asn Gln Ser Tyr Ile Cys Asp Thr Gly 40 His Cys Cys Gly Gln Ser Gln Cys Cys Asn Tyr Tyr Tyr Glu Leu Trp Trp Phe Trp Leu Val Trp Thr Ile Ile Ile Ile Leu Ser Cys Cys 70 Val Cys His His Arg Arg Ala Lys His Arg Leu Gln Ala Gln Gln Arg 90 Gln His Glu Ile Asn Leu Ile Ala Tyr Arg Glu Ala His Asn Tyr Ser 105 Ala Leu Pro Phe Tyr Phe Arg Phe Leu Pro Asn Tyr Leu Leu Pro Pro 120 125 Tyr Glu Glu Val Val Asn Arg Pro Pro Thr Pro Pro Pro Pro Tyr Ser 130 135 Ala Phe Gln Leu Gln Gln Gln 150 151

<210> 1795 <211> 177 <212> PRT <213> Homo sapiens

<400> 1795

Met Ala Ala Leu Ala Ala Ala Lys Lys Val Trp Ser Ala Arg Arg 10 Leu Leu Val Leu Leu Phe Thr Pro Leu Ala Leu Leu Pro Val Val Phe 25 Ala Leu Pro Pro Lys Glu Gly Arg Cys Leu Phe Val Ile Leu Leu Met 40 Ala Val Tyr Trp Cys Thr Glu Ala Leu Pro Leu Ser Val Thr Ala Leu 55 60 Leu Pro Ile Val Leu Phe Pro Phe Met Gly Ile Leu Pro Ser Asn Lys 70 75 Val Cys Pro Gln Tyr Phe Leu Asp Thr Asn Phe Leu Phe Leu Ser Gly 85 90 Leu Ile Met Ala Ser Ala Ile Glu Glu Trp Asn Leu His Arg Arg Ile 105 Ala Leu Lys Ile Leu Met Leu Val Gly Val Gln Pro Ala Arg Leu Ile

<210> 1796

<211> 98

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(98)

<223> Xaa = any amino acid or nothing

<400> 1796

Thr Leu 98

<210> 1797

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1797

Met Phe Leu Trp Leu Phe Leu Ile Leu Ser Ala Leu Ile Ser Ser Thr 1 5 10 Asn Ala Asp Ser Asp Ile Ser Val Glu Ile Cys Asn Val Cys Ser Cys 20 25 Val Ser Val Glu Asn Val Leu Tyr Val Asn Cys Glu Lys Val Ser Val 40 Tyr Arg Pro Asn Gln Leu Lys Pro Pro Trp Ser Asn Phe Tyr His Leu 55 60 Asn Phe Gln Asn Asn Phe Leu Asn Ile Leu Tyr Pro Asn Thr Phe Leu 75 Asn Phe Ser His Ala Val Ser Leu His Leu Gly Asn Asn Lys Leu Gln 85 90

<210> 1798 <211> 91 <212> PRT <213> Homo sapiens

<210> 1799 <211> 77 <212> PRT <213> Homo sapiens

Glu Gly Ser Gln Lys Glu Pro Thr Leu Thr Thr Pro * 65 70 75 76

<210> 1800 <211> 182 <212> PRT <213> Homo sapiens

40 Tyr Phe Asn Ile Phe Ser Arg Ile Leu Gly Gly Ser Gln Val Glu Lys 55 60 Gly Ser Tyr Pro Trp Gln Val Ser Leu Lys Gln Arg Gln Lys His Ile 70 75 Cys Gly Gly Ser Ile Val Ser Pro Gln Trp Val Ile Thr Ala Ala His 90 Cys Ile Ala Asn Arg Asn Ile Val Ser Thr Leu Asn Val Thr Ala Gly 100 105 Glu Tyr Asp Leu Ser Gln Thr Asp Pro Gly Glu Gln Thr Leu Thr Ile 115 120 125 Glu Thr Val Ile Ile His Pro His Phe Ser Thr Lys Lys Pro Met Asp 135 140 Tyr Asp Ile Ala Leu Leu Lys Met Ala Gly Ala Phe Gln Phe Gly His 150 155 160 Phe Val Gly Pro Ile Cys Leu Pro Glu Leu Arg Glu Gln Phe Glu Ala 165 170 Gly Phe Ile Cys Thr Thr 180 182

<210> 1801 <211> 202 <212> PRT <213> Homo sapiens

<400> 1801

Met Thr Glu Ala Thr Phe Asp Thr Leu Arg Leu Trp Leu Ile Ile Leu 10 Leu Cys Ala Leu Arg Leu Ala Met Met Arg Ser His Leu Gln Ala Tyr 25 Leu Asn Leu Ala Gln Lys Cys Val Asp Gln Met Lys Lys Glu Ala Gly 35 40 45 Arg Ile Ser Thr Val Glu Leu Gln Lys Met Val Ala Arg Val Phe Tyr 55 60 Tyr Leu Cys Val Ile Ala Leu Gln Tyr Val Ala Pro Leu Val Met Leu 65 70 75 Leu His Thr Thr Leu Leu Lys Thr Leu Gly Asn His Ser Trp Gly 90 Ile Tyr Pro Glu Ser Ile Ser Thr Leu Pro Val Asp Asn Ser Leu Leu 100 105 Ser Asn Ser Val Tyr Ser Glu Leu Pro Ser Ala Glu Gly Lys Met Lys 120 125 His Asn Ala Arg Gln Gly Pro Ala Val Pro Pro Gly Met Gln Ala Tyr 135 140 Gly Ala Ala Pro Phe Glu Asp Leu Gln Leu Asp Phe Thr Glu Met Pro 150 Lys Cys Gly Asp Leu Ile Pro Arg Phe Gly Leu Pro Leu Arg Ile Gly 165 170 Ser Asp Asn Gly Leu Ala Phe Val Ala Asp Leu Val Gln Lys Thr Ala 180 185 190 · Lys Trp Lys Gly Pro Gln Ile Val Val Leu 200 202

<210> 1802

<211> 172 <212> PRT <213> Homo sapiens

<400> 1802 Met Asn Asn Phe Arg Ala Thr Ile Leu Phe Trp Ala Ala Ala Trp 5 10 Ala Lys Ser Gly Lys Pro Ser Gly Glu Met Asp Glu Val Gly Val Gln 25 Lys Cys Lys Asn Ala Leu Lys Leu Pro Val Leu Glu Val Leu Pro Gly 40 Gly Gly Trp Asp Asn Leu Arg Asn Val Asp Met Gly Arg Val Met Glu 55 Leu Thr Tyr Ser Asn Cys Arg Thr Thr Glu Asp Gly Gln Tyr Ile Ile 70 75 Pro Asp Glu Ile Phe Thr Ile Pro Gln Lys Gln Ser Asn Leu Glu Met 85 90 Asn Ser Glu Ile Leu Glu Ser Trp Ala Asn Tyr Gln Ser Ser Thr Ser 100 105 110 Tyr Ser Ile Asn Thr Glu Leu Ser Leu Phe Ser Lys Val Asn Gly Lys 120 125 Phe Ser Thr Glu Phe Gln Arg Met Lys Thr Leu Gln Val Lys Asp Gln 135 140 Ala Ile Thr Thr Arg Val Gln Val Arg Asn Leu Val Tyr Thr Val Lys 145 150 155 Ile Asn Pro Thr Leu Glu Leu Ser Ser Gly Phe Arg 165 170 172

<210> 1803 <211> 158 <212> PRT <213> Homo sapiens

<400> 1803 Met Ser Leu Arg Leu Gly Pro Ala Trp Arg His Leu Thr Cys Leu Gly 5 10 Thr Lys His Ser Lys Ala Asn Ser Val Leu Ala Ser Gln His Ala Gly 25 Phe Phe Val Ala Gln Gly Arg Trp Ala Ile His Arg Ala Phe Ser Ser 40 Arg Thr Ser Pro Thr Pro Pro Arg Gly Pro Leu Leu Pro Gly Arg 55 60 His Pro Leu Leu Ser Arg Arg Arg Ala Gln Ala Ile Arg Ser Ser Thr 70 75 Arg Pro Ser Leu Pro Ala His Leu Phe Lys Pro Ala Pro Ala Ile Ala 90 Leu Ile Val Ser Pro Leu Arg Phe Pro Arg Arg Thr Ser Pro Cys His 105 Leu Ser Gly Pro Pro Ala Pro Pro Cys Arg Thr Leu His Thr Leu Leu 120 Arg Pro Val Cys Val Val Arg Arg Thr Pro Pro Val Phe Phe Thr Ser 130 135 140 Phe Thr Pro Ala Arg Ala Ala Val Ala Ser His Pro Thr Pro

<210> 1804 <211> 102 <212> PRT <213> Homo sapiens

<400> 1804 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr Ala 10 Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His Asn Val 25 Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr Lys Ile Asn 40 Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu Leu Trp Asn Ser 55 Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp Arg Gln Phe Leu Ser 75 70 Ser Gln Pro Arg Ser Gly Ala Gly Leu Ser Ser Arg Ala Val Val Leu 85 90 Ala Arg Val Gln Ala Leu 100 102

<210> 1805 <211> 54 <212> PRT <213> Homo sapiens

<210> 1806 <211> 56 <212> PRT <213> Homo sapiens

<210> 1807 <211> 47 <212> PRT <213> Homo sapiens

<400> 1807

 Met Gln Ser Met Ile Asn Met Ile Val Ser Leu Leu Gly Leu Val Ala

 1
 5

 Thr Val Thr Leu Ile Pro Ala Phe Arg Gly His Phe Ile Ala Ala Arg

 20
 25

 Leu Gly Gly Gln Ser Leu Gly Lys Thr Ser Arg Gln His Met
 *

 35
 40

<210> 1808 <211> 119 <212> PRT <213> Homo sapiens

<400> 1808

Met Ala Ala Ser Leu Leu Ala Val Leu Leu Leu Leu Leu Clu Arg 10 Gly Met Phe Ser Ser Pro Ser Pro Pro Pro Ala Leu Leu Glu Lys Val 25 Phe Gln Tyr Ile Asp Leu His Gln Asp Glu Phe Val Gln Thr Leu Lys 40 Glu Trp Val Ala Ile Glu Ser Asp Ser Val Gln Pro Val Pro Arg Phe 50 55 60 Arg Gln Glu Leu Phe Arg Met Met Ala Val Ala Ala Asp Thr Leu Gln 70 75 80 Arg Leu Gly Ala Arg Val Ala Ser Val Asp Met Gly Pro Gln Gln Leu 85 90 95 Pro Asp Gly Gln Ser Leu Pro Ile Pro Pro Val Ile Leu Ala Glu Leu 100 105 Gly Ser Asp Pro Thr Lys Gly 115 119

<210> 1809 <211> 91 <212> PRT <213> Homo sapiens

<400> 1809

 Met Ser Arg Ser His Val Ala Leu Leu Gly Leu Ser Leu Leu Leu Met

 1
 5
 10
 15

 Leu Leu Leu Tyr Ala Gly Leu Pro Ser Pro Pro Glu Gln Thr Ser Cys
 20
 25
 30

 Leu Trp Gly Asp Pro Asn Val Thr Val Leu Ala Val Ser Thr Pro Ala
 35
 40
 45

 Asn Ser Pro Met Phe Tyr Leu Glu Gly Leu Pro Leu His Leu Ala His

<210> 1810 <211> 58 <212> PRT <213> Homo sapiens

<210> 1811 <211> 48 <212> PRT <213> Homo sapiens

<210> 1812 <211> 84 <212> PRT <213> Homo sapiens

Glu Asp Asn Phe Val Ala Leu Ala Thr Gly Gln Lys Gly Phe Gly Tyr
65 70 75 80
Lys Asn Ser *
83

<210> 1813 <211> 46 <212> PRT <213> Homo sapiens

<400> 1813

 Met Ala Ala Ala Ala Asp Asp Thr Ile Leu Gly Phe Arg Ala Ala Leu Leu

 1
 5

 Ile Leu Val Ala Ala Ala Ala Ala Leu Ser Pro Lys Val Ala Cys Arg

 20
 25

 Val Gly Thr Val Arg Arg Arg Glu Thr Pro Gln Pro Ser Ala

 35
 40

<210> 1814 <211> 65 <212> PRT <213> Homo sapiens

<400> 1814

<210> 1815 <211> 100 <212> PRT <213> Homo sapiens

<400> 1815

 Met
 Phe
 Lys
 Ser
 Lys
 Leu
 Leu
 Asn
 Phe
 Tyr
 Ile
 Phe
 Val
 Asn
 Cys
 Met

 Asn
 Phe
 Leu
 Met
 Leu
 Ser
 Ile
 Ala
 Ser
 Phe
 Asn
 Pro
 Phe
 Trp
 Ser
 Glu

 Ile
 Ile
 Val
 Cys
 Asn
 Ile
 Gln
 Phe
 Phe
 Tyr
 Tyr
 Thr
 Leu
 Ser
 Ser
 Arg

 Val
 His
 Val
 Gln
 Val
 Cys
 Tyr
 Thr
 Gly
 Ile
 His
 Val
 Pro

 Trp
 Phe
 Ala
 Ala
 Pro
 Ile
 Asn
 Fyr
 Thr
 Thr
 Leu
 Ser
 Ser
 Arg

 Val
 His
 Val
 Gln
 Val
 Cys
 Tyr
 Thr
 Gly
 Ile
 His
 Val
 Pro

 Cys
 Trp
 Phe
 Ala
 Ala
 Pro
 Ile
 Asn
 Ser
 Ser
 Phe
 Thr
 L

65 70 75 80
Pro Asn Ala Ile Pro Phe Ile Val Pro His Pro Gln Thr Gly Pro Asn
85 90 95
Val Arg Cys Ser
100

<210> 1816 <211> 115 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(115)

<223> Xaa = any amino acid or nothing

<210> 1817 <211> 144 <212> PRT <213> Homo sapiens

114

<400> 1817 Met Val Leu Gly Leu Leu Val Gln Ile Trp Ala Leu Gln Glu Ala Ser 5 10 Ser Leu Ser Val Gln Gln Gly Pro Asn Leu Leu Gln Val Arg Gln Gly 25 Ser Gln Ala Thr Leu Val Cys Gln Val Asp Gln Ala Thr Ala Trp Glu 40 Arg Leu Arg Val Lys Trp Thr Lys Asp Gly Ala Ile Leu Cys Gln Pro 55 Tyr Ile Thr Asn Gly Ser Leu Ser Leu Gly Val Cys Gly Pro Gln Gly 70 75 Arg Leu Ser Trp Gln Ala Pro Ser His Leu Thr Leu Gln Leu Asp Pro 85 90 Val Ser Leu Asn His Ser Gly Ala Tyr Val Cys Trp Ala Ala Val Glu 100 105

<210> 1818 <211> 115 <212> PRT <213> Homo sapiens

<400> 1818 Met Gln Ala Asp Arg Gly Gly Val Leu Phe Leu Val Ala Leu Pro Gly 10 Leu Trp Glu Thr Val Leu Arg His Pro Gly Ala Ser Pro Glu Pro Val 20 25 Ser Leu His Thr Gly Leu Ala Ala Glu Pro Leu Leu Gly Trp Arg Ala Glu Val Ala Thr Ala Ala Gly Leu Gln Asp Arg Arg Ile Gly Arg Arg 55 Ser Leu Pro Ala Thr Leu Pro Pro Pro Phe Pro Gln Ala Gly Asp Leu 70 Arg Glu Ser Ile Leu Leu Pro Cys Arg Glu Ser Arg Ser Thr Ser 85 90 Trp Leu Ser Pro Tyr Trp Val Pro Glu Ile Pro Gly Thr Leu His Asp 105 Arg Gly Arg 115

<210> 1819 <211> 70 <212> PRT <213> Homo sapiens

<210> 1820 <211> 635 <212> PRT <213> Homo sapiens

<400> 1820 Met Leu Arg Ser Leu Leu Val Tyr Met Leu Phe Leu Leu Val Thr Leu 10 Leu Ala Ser Tyr Gly Asp Ala Ser Cys His Gly His Ala Tyr Arg Leu 25 Gln Ser Ala Ile Lys Gln Glu Leu His Ser Arg Ala Phe Leu Ala Ile 40 Thr Arg Ser Glu Glu Leu Trp Pro Trp Met Ala His Val Leu Leu Pro 55 60 Tyr Val His Gly Asn Gln Ser Ser Pro Glu Leu Gly Pro Pro Arg Leu 70 75 Arg Gln Val Arg Leu Gln Glu Ala Leu Tyr Pro Asp Pro Pro Gly Pro 85 90 Arg Val His Thr Cys Ser Ala Ala Gly Gly Phe Ser Thr Ser Asp Tyr 100 105 Asp Val Gly Trp Glu Ser Pro His Asn Gly Ser Gly Thr Trp Ala Tyr 120 125 Ser Ala Pro Asp Leu Leu Gly Ala Trp Ser Trp Gly Ser Cys Ala Val 135 140 Tyr Asp Ser Gly Gly Tyr Val Gln Glu Leu Gly Leu Ser Leu Glu Glu 150 155 Ser Arg Asp Arg Leu Arg Phe Leu Gln Leu His Asn Trp Leu Asp Asn 170 Arg Ser Arg Ala Val Phe Leu Glu Leu Thr Arg Tyr Ser Pro Ala Val 180 185 Gly Leu His Ala Ala Val Thr Leu Arg Leu Glu Phe Pro Ala Ala Gly 200 Arg Ala Leu Ala Ala Leu Ser Val Arg Pro Phe Ala Leu Arg Arg Leu 215 220 Ser Ala Gly Leu Ser Leu Pro Leu Leu Thr Ser Val Cys Leu Leu Leu 230 235 Phe Ala Val His Phe Ala Val Ala Glu Ala Arg Thr Trp His Arg Glu 250 255 245 Gly Arg Trp Arg Val Leu Arg Leu Gly Ala Trp Ala Arg Trp Leu Leu 260 265 270 Val Ala Leu Thr Ala Ala Thr Ala Leu Val Arg Leu Ala Gln Leu Gly 280 Ala Ala Asp Arg Gln Trp Thr Arg Phe Val Arg Gly Arg Pro Arg Arg 295 Phe Thr Ser Phe Asp Gln Val Ala His Val Ser Ser Ala Ala Arg Gly 310 315 Leu Ala Ala Ser Leu Leu Phe Leu Leu Val Lys Ala Ala Gln His 325 330 Val Arg Phe Val Arg Gln Trp Ser Val Phe Gly Lys Thr Leu Cys Arg 345 Ala Leu Pro Glu Leu Leu Gly Val Thr Leu Gly Leu Val Val Leu Gly 360 365 Val Ala Tyr Ala Gln Leu Ala Ile Leu Leu Val Ser Ser Cys Val Asp 375 Ser Leu Trp Ser Val Ala Gln Ala Leu Leu Val Leu Cys Pro Gly Thr · 390 395 Gly Leu Ser Thr Leu Cys Pro Ala Glu Ser Trp His Leu Ser Pro Leu 405 410 Leu Cys Val Gly Leu Trp Ala Leu Arg Leu Trp Gly Ala Leu Arg Leu 420 425 Gly Ala Val Ile Leu Arg Trp Arg Tyr His Ala Leu Arg Gly Glu Leu 440

Tyr Arg Pro Ala Trp Glu Pro Gln Asp Tyr Glu Met Val Glu Leu Phe Leu Arg Arg Leu Arg Leu Trp Met Gly Leu Ser Lys Val Lys Glu Phe 470 Arg His Lys Val Arg Phe Glu Gly Met Glu Pro Leu Pro Ser Arg Ser 485 490 Ser Arg Gly Ser Lys Val Ser Pro Asp Val Pro Pro Pro Ser Ala Gly 500 505 Ser Asp Ala Ser His Pro Ser Thr Ser Ser Ser Gln Leu Asp Gly Leu 515 520 Ser Val Ser Leu Gly Arg Leu Gly Thr Arg Cys Glu Pro Glu Pro Ser 535 540 Arg Leu Gln Ala Val Phe Glu Ala Leu Leu Thr Gln Phe Asp Arg Leu 550 555 Asn Gln Ala Thr Glu Asp Val Tyr Gln Leu Glu Gln Gln Leu His Ser 565 570 Leu Gln Gly Arg Arg Ser Ser Arg Ala Pro Ala Gly Ser Ser Arg Gly 585 Pro Ser Pro Gly Leu Arg Pro Ala Leu Pro Ser Arg Leu Ala Arg Ala 600 Ser Arg Gly Val Asp Leu Ala Thr Gly Pro Ser Arg Thr Pro Leu Arg 610 615 Ala Lys Asn Lys Val His Pro Ser Ser Thr * 630 634

<210> 1821 <211> 84 <212> PRT

<213> Homo sapiens

<210> 1822 <211> 108 <212> PRT <213> Homo sapiens

. 30 20 25 Gly Ser Ala Leu Phe Pro Ser Ala Ala Ala Val Gly Lys Gln Gly Ser 40 Met Gly Val Thr Ser His Met Gln Cys Pro Val Cys Gln His Pro Arg 55 60 Asp Val Leu Leu Ala Ser Pro Val Ser His Ser His Ala Cys Gln Pro 70 75 Gln Pro Ala Gly Cys Ser Asn Cys His Leu Gly His Leu Thr Arg Ser 85 90 Pro Pro Phe Gln Gly Leu Leu Pro Leu Leu Gln * 100 105 107

<210> 1823 <211> 74 <212> PRT <213> Homo sapiens

<210> 1824 <211> 58 <212> PRT <213> Homo sapiens

<210> 1825 <211> 225 <212> PRT <213> Homo sapiens

<400> 1825

Met Ala Cys Lys Gly Leu Leu Gln Gln Val Gln Gly Pro Arg Leu Pro 10 Trp Thr Arg Leu Leu Leu Leu Leu Val Phe Ala Val Gly Phe Leu 25 Cys His Asp Leu Arg Ser His Ser Ser Phe Gln Ala Ser Leu Thr Gly 40 Arg Leu Leu Arg Ser Ser Gly Phe Leu Pro Ala Ser Gln Gln Ala Cys 55 Ala Lys Leu Tyr Ser Tyr Ser Leu Gln Gly Tyr Ser Trp Leu Gly Glu 70 Thr Leu Pro Leu Trp Gly Ser His Leu Leu Thr Val Val Arg Pro Ser Leu Gln Leu Ala Trp Ala His Thr Asn Ala Thr Val Ser Phe Leu Ser 105 Ala His Cys Ala Ser His Leu Ala Trp Phe Gly Asp Ser Leu Thr Ser 120 125 Leu Ser Gln Arg Leu Gln Ile Gln Leu Pro Asp Ser Val Asn Gln Leu 135 Leu Arg Tyr Leu Arg Glu Leu Pro Leu Leu Phe His Gln Asn Val Leu 155 150 Leu Pro Leu Trp His Leu Leu Glu Ala Leu Ala Trp Ala Gln Glu 165 170 His Cys His Glu Ala Cys Arg Gly Glu Val Thr Trp Asp Cys Met Lys 185 Thr Gln Leu Ser Glu Ala Val His Trp Thr Trp Leu Cys Leu Gln Asp 200 205 Ile Thr Val Ala Phe Leu Asp Trp Ala Leu Ala Leu Ile Ser Gln Gln 215

<210> 1826 <211> 119 <212> PRT

<213> Homo sapiens

<400> 1826

Met Tyr Arg Glu Val Cys Ser Ile Arg Phe Leu Phe Thr Ala Val Ser 10 Leu Leu Ser Leu Phe Leu Ser Ala Phe Trp Leu Gly Leu Leu Tyr Leu 25 Val Ser Pro Leu Glu Asn Glu Pro Lys Glu Met Leu Thr Leu Ser Glu 40 Tyr His Glu Arg Ala Arg Ser Gln Gly Gln Gln Leu Leu Gln Phe Gln 55 Ala Glu Leu Asp Lys Leu His Lys Glu Ala Ser Leu Val Cys Gly Cys 70 75 Pro Ser Leu Arg Glu Val Pro Ser Ser Ala Val Ser Arg Leu Glu Pro 90 Pro Ser Ile Ala Gln Pro Leu Leu Ser Arg Leu Gln Leu Tyr Leu Ser 100 105 Asp Pro Ser Ser Tyr Leu Val 115

<210> 1827 <211> 58 <212> PRT <213> Homo sapiens

<400> 1827

<210> 1828 <211> 102 <212> PRT <213> Homo sapiens

<400> 1828

<210> 1829 <211> 88 <212> PRT <213> Homo sapiens

<400> 1829

Met Leu Ser Asp Tyr Ala Lys Pro 85 88

<210> 1830

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1830

Met Lys Trp Arg Arg Lys Ser Ala Tyr Trp Lys Ala Leu Lys Val Phe Lys Leu Pro Val Glu Phe Leu Leu Leu Thr Val Pro Val Val Asp 20 25 Pro Asp Lys Asp Asp Gln Asn Trp Lys Arg Pro Leu Asn Cys Leu His 40 Leu Val Ile Ser Pro Leu Val Val Leu Thr Leu Gln Ser Gly Thr 55 Tyr Gly Val Tyr Glu Ile Gly Gly Leu Val Pro Val Trp Val Val Val 75 Val Ile Ala Gly Thr Ala Leu Ala Ser Val Thr Phe Phe Ala Thr Ser 90 Asp Ser Gln Pro Pro Arg Leu His Trp Leu Phe Ala Phe Leu Gly Phe 100 105 Leu Thr Ser Ala Leu Trp Ile Asn 115 120

<210> 1831

<211> 64

<212> PRT

<213> Homo sapiens

<400> 1831

<210> 1832

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1832

Met Gly Ile Lys His Phe Ser Gly Leu Phe Val Leu Leu Cys Ile Gly

1 10 15
Phe Gly Leu Ser Ile Leu Thr Thr Ile Gly Glu His Ile Val Tyr Arg

<210> 1833 <211> 60 <212> PRT <213> Homo sapiens

<210> 1834 <211> 62 <212> PRT <213> Homo sapiens

<210> 1835 <211> 71 <212> PRT <213> Homo sapiens

 Ser Pro Leu Trp Glu Val Val Phe Cys His Thr Pro Cys Phe Arg Ala

 35
 40
 45

 Gln Pro Gln Leu Asp Arg Ala Gly Ser Ser Phe Leu Ile Tyr Pro Ser
 50
 55

 Pro His Ser Thr Ser Asn
 *

 65
 70

<210> 1836 <211> 110 <212> PRT <213> Homo sapiens

<400> 1836 Met Leu Met Tyr Met Phe Tyr Val Leu Pro Phe Cys Gly Leu Ala Ala 10 Tyr Ala Leu Thr Phe Pro Gly Cys Ser Trp Leu Pro Asp Trp Ala Leu 20 25 Val Phe Ala Gly Gly Ile Gly Gln Ala Gln Phe Ser His Met Gly Ala 40 Ser Met His Leu Arg Thr Pro Phe Thr Tyr Arg Val Pro Glu Asp Thr 60 Trp Gly Cys Phe Phe Val Cys Asn Leu Leu Tyr Ala Leu Gly Pro His 70 Leu Leu Ala Tyr Arg Cys Leu Gln Trp Pro Ala Phe Phe His Gln Pro 85 90 Pro Pro Ser Asp Pro Leu Ala Leu His Lys Lys Gln His *

105

<210> 1837 <211> 91 <212> PRT <213> Homo sapiens

<210> 1838 <211> 201 <212> PRT <213> Homo sapiens

<400> 1838 Met Pro Ile Gly Leu Arg Gly Leu Met Ile Ala Val Met Leu Ala Ala 10 Leu Met Ser Ser Leu Thr Ser Ile Phe Asn Ser Ser Ser Thr Leu Phe 25 Thr Met Asp Ile Trp Arg Arg Leu Arg Pro Arg Ser Gly Glu Arg Glu 40 Leu Leu Leu Val Gly Arg Leu Val Ile Val Ala Leu Ile Gly Val Ser 55 Val Ala Trp Ile Pro Val Leu Gln Asp Ser Asn Ser Gly Gln Leu Phe 70 75 Ile Tyr Met Gln Ser Val Thr Ser Ser Leu Ala Pro Pro Val Thr Ala 85 90 Val Phe Val Leu Gly Val Phe Trp Arg Arg Ala Asn Glu Gln Gly Ala 105 Phe Trp Gly Leu Ile Ala Gly Leu Val Val Gly Ala Thr Arg Leu Val 115 120 125 Leu Glu Phe Leu Asn Pro Ala Pro Pro Cys Gly Glu Pro Asp Thr Arg 135 140 Pro Ala Val Leu Gly Ser Ile His Tyr Leu His Phe Ala Val Ala Leu 150 155 Phe Ala Leu Ser Gly Ala Val Val Ala Gly Ser Leu Leu Thr Pro 165 170 Pro Pro Gln Ser Val Gln Ile Glu Asn Leu Thr Trp Trp Thr Leu Ala 180 185 Gln Asp Val Pro Leu Gly Thr Lys Ala 200 201

<210> 1839

<211> 130

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(130)

<223> Xaa = any amino acid or nothing

<400> 1839

Met Leu Phe Phe Leu Gln Ser Leu Phe Met Leu Ala Thr Val Val Leu 1 5 10 15 Tyr Phe Ser His Leu Lys Glu Tyr Val Ala Ser Met Val Phe Ser Leu 25 20 Ala Leu Gly Trp Thr Asn Met Leu Tyr Tyr Thr Arg Gly Phe Gln Gln 40 45 Met Gly Ile Tyr Ala Val Met Ile Glu Lys Met Ile Leu Arg Asp Leu 55 Cys Arg Phe Met Phe Val Tyr Ile Val Phe Leu Phe Gly Phe Ser Thr 70 75 ' Ala Val Val Thr Leu Ile Glu Asp Gly Lys Asn Asp Ser Leu Pro Ser 85 90 Glu Ser Thr Ser His Arg Trp Arg Gly Phe Ser Xaa Thr Pro Leu Xaa 100 105 Leu Leu His Lys Leu Tyr Ser Thr Cys Leu Glu Leu Ser Asn Ser Thr 120

Xaa Asp 130

<210> 1840

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1840

<210> 1841

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1841

 Met
 Thr
 Ala
 Arg
 Leu
 Met
 Arg
 Ser
 Leu
 Leu
 Ala
 Ala
 Gln
 Leu
 Thr
 Phe

 Val
 Tyr
 Arg
 Val
 Ala
 His
 Leu
 Met
 Asn
 Val
 Ala
 Gln
 Arg
 Ile
 Arg
 Ile
 Arg
 Ile
 Leu
 Ala
 Leu
 Leu
 Ala
 Leu
 Arg
 Ala
 Ala
 Leu
 Arg
 Ala
 Ala
 Leu
 Arg
 Ala
 Ala
 Leu
 Arg
 Ala
 Ala
 Ala
 Ala
 Arg
 Ala
 Ala
 Arg
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Arg
 Ala
 Ala
 Ala
 Arg
 Ala
 Ala
 Arg
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Arg
 Ala
 Ala
 Arg
 Ala
 Ala

<210> 1842

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1842

65 70 75 77

<210> 1843

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1843

Met Met His Asn Ile Ile Val Lys Glu Leu Ile Val Thr Phe Phe Leu

1 5 10 15

Gly Ile Thr Val Val Gln Met Leu Ile Ser Val Thr Gly Leu Lys Gly
20 25 30

Val Glu Ala Gln Asn Gly Ser Glu Ser Glu Val Phe Val Gly Lys Tyr 35 40 45

Glu Thr Leu Val Phe Tyr Trp Pro Ser Leu Leu Cys Leu Ala Phe Leu 50 55 60

Leu Gly Arg Phe Leu His Met Phe Val Lys Ala Leu Arg Val His Leu 65 70 75 80

Gly Trp Glu Leu Gln Val Glu Glu Lys Ser Val Leu Glu Val His Gln 85 90 95

Gly Glu His Val Lys Gln Leu Leu Arg Ile Pro Arg Pro 100 105 109

<210> 1844

<211> 85

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(85)

<223> Xaa = any amino acid or nothing

<400> 1844

Met Thr Ile His Leu Cys Ser Asn Leu Met Cys His Phe Leu Gln Arg 1 5 10 15

Met Gly Thr Ile Leu Leu Cys Pro Asn Met Gln Pro His Gln Asn Leu 20 25 30

Thr Thr Val Ile Cys Ser Lys Gly Asn Leu Leu Arg Ala Val Lys Gly
35 40

Ser Lys Ser Leu Arg Asn Ala Arg Lys Tyr Pro Phe His His Pro Pro 50 60

Xaa Xaa Glu Pro Pro Asn Gly Gly Gln Thr Arg Xaa Gly Gly Ala Arg
65 70 75 80

Phe Lys Gln Pro Thr

85

<210> 1845

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1845 Met Tyr Ala Leu Tyr Ile Thr Val His Gly Tyr Phe Leu Ile Thr Phe 1 5 10 Leu Phe Gly Met Val Val Leu Ala Leu Val Val Trp Lys Ile Phe Thr 20 25 Leu Ser Arg Ala Thr Ala Val Lys Glu Arg Gly Lys Asn Arg Lys Lys 40 Val Leu Thr Leu Leu Gly Leu Ser Ser Leu Val Gly Val Thr Trp Gly 55 60 Leu Ala Ile Phe Thr Pro Leu Gly Leu Ser Thr Val Tyr Ile Phe Ala 75 Leu Phe Asn Ser Leu Gln Gly Val Phe Ile Cys Cys Trp Phe Thr Ile Leu Tyr Leu Pro Ser Gln Ser Thr Thr Val Ser Ser Ser Thr . 105

<210> 1846 <211> 94 <212> PRT <213> Homo sapiens

<210> 1847 <211> 1300 <212> PRT <213> Homo sapiens

| | | | | 85 | | | | | 90 | | | | | 95 | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Cys | Pro | Asp | Tyr 100 | Glu | Ser | Phe | Cys | Ala 105 | Glu | Val | His | Asn | Pro 110 | Thr | Ser |
| Pro | Pro | Ser 115 | Ser | Lys | Lys | Ala | Pro 120 | Pro | Pro | Ser | Gly | Ala 125 | Ser | Gln | Thr |
| Ile | Lys 130 | Ser | Thr | Thr | Lys | Arg 135 | Ser | Pro | Lys | Pro | Pro 140 | Asn | ГÀЗ | Lys | Lys |
| Thr 145 | Lys | Lys | Val | Ile | Glu 150 | Ser | Glu | Glu | Ile | Thr 155 | Glu | Glu | His | Ser | Val 160 |
| | | | | 165 | Ser | | | | 170 | | | | | 175 | |
| | | | 180 | | Ile | | | 185 | | | | | 190 | | _ |
| | | 195 | | | Leu | | 200 | | | | | 205 | | _ | |
| | 210 | | | | Pro | 215 | | | | | 220 | | | _ | |
| 225 | | | | | Asp 230 | | | | | 235 | | | | | 240 |
| | | | | 245 | Val | | | | 250 | | | | | 255 | _ |
| | | | 260 | | Pro Val | | | 265 | | | | | 270 | | _ |
| | | 275 | | | Lys | | 280 | | | | | 285 | | _ | |
| | 290 | | | | Thr | 295 | | | | | 300 | | | | |
| 305 | | | | | 310 Lys | | | | | 315 | | | | | 320 |
| | | | | 325 | Pro | | | | 330 | | | | _ | 335 | |
| | | | 340 | | Pro | | | 345 | | | | | 350 | | |
| | | 355 | | | Ala | | 360 | | | | | 365 | | | |
| | 370 Thr | Lys | Ser | Ala | Pro | 375 Thr | Thr | Pro | Lys | Glu | 380 Pro | Ala | Pro | Thr | Thr |
| 385 Thr | Lys | Glu | Pro | | 390 Pro | Thr | Thr | Pro | | 395 Glu | Pro | Ala | Pro | Thr | 400 Thr |
| Thr | Lys | Glu | | 405 Ala | Pro | Thr | Thr | | 410 Lys | Ser | Ala | Pro | | 415 Thr | Pro |
| Lys | Glu | Pro 435 | 420 Ala | Pro | Thr | Thr | Pro 440 | 425 Lys | Lys | Pro | Ala | Pro 445 | 430 Thr | Thr | Pro |
| ГÀЗ | Glu 450 | | Ala | Pro | Thr | Thr 455 | | Lys | Glu | Pro | Thr 460 | | Thr | Thr | Pro |
| Lys 465 | Glu | Pro | Ala | Pro | Thr 470 | | Lys | Glu | Pro | Ala 475 | | Thr | Thr | Pro | Lys 480 |
| Glu | Pro | Ala | Pro | Thr 485 | Ala | Pro | Lys | Lys | Pro 490 | Ala | Pro | Thr | Thr | Pro 495 | |
| | | | 500 | | Thr | | | 505 | | | | | 510 | | _ |
| | | 515 | | | Thr | | 520 | | | | | 525 | | | _ |
| | 530 | | | | Thr | 535 | | | | | 540 | | | | |
| A1a 545 | Pro | Inr | Thr | Pro | Lys 550 | GLu | Pro | Ser | Pro | Thr 555 | Thr | Thr | Lys | Glu | Pro 560 |

| Ala | Pro | Thr | Thr | Pro 565 | Lys | Glu | Pro | Ala | Pro 570 | Thr | Thr | Pro | ràs | Lys 575 | Pro |
|------------|------------|------------|------------|------------|------------|---------------|-------------|------------|------------|------------|--------------|-------------|------------|------------|------------|
| Ala | Pro | Thr | Thr 580 | | Lys | Glu | Pro | Ala 585 | | Thr | Thr | Pro | Lys 590 | | Pro |
| Ala | Pro | Thr 595 | Thr | Thr | Lys | Lys | Pro 600 | | Pro | Thr | Ala | Pro 605 | | Glu | Pro |
| Ala | Pro 610 | | Thr | Pro | Lys | Glu 615 | | Ala | Pro | Thr | | | Lys | Lys | Leu |
| Thr | | Thr | Thr | Dro | C1 | | T 011 | 77. | Dwo | III la sa | 620 | D | 01 | T | D |
| 625 | | | | • | 630 | | | | | 635 | | | | - | 640 |
| | | | Thr | 645 | | | | | 650 | | | | | 655 | |
| Thr | Pro | Thr | Thr 660 | Pro | Glu | Glu | Pro | Ala 665 | Pro | Thr | Thr | Pro | Lys 670 | Ala | Ala |
| Ala | Pro | Asn 675 | Thr | Pro | Lys | Glu | Pro 680 | Ala | Pro | Thr | Thr | Pro 685 | Lys | Glu | Pro |
| Ala | Pro 690 | Thr | Thr | Pro | Lys | Glu 695 | | Ala | Pro | Thr | Thr 700 | | Lys | Glu | Thr |
| Ala 705 | | Thr | Thr | Pro | Lys 710 | | Thr | Ala | Pro | Thr 715 | | Leu | Lys | Glu | |
| | Pro | Thr | Thr | Dro | | Tare | Dro | λla | Dro | . — - | <i>α</i> 1., | T 011 | 717 | Dwo | 720 |
| 1114 | 110 | 1111 | 1111 | 725 | БУБ | цуз | FLO | міа | 730 | цуъ | GIU | пеп | Ала | 735 | TILL |
| Thr | Thr | Lys | Glu 740 | | Thr | Ser | Thr | Thr 745 | | Asp | Lys | Pro | Ala 750 | | Thr |
| Thr | Pro | Lys 755 | Gly | Thr | Ala | Pro | Thr 760 | | Pro | Lys | Glu | | | Pro | Thr |
| Thr | Pro 770 | | Glu | Pro | Ala | Pro | | Thr | Pro | Lys | _ | 765 Thr | Ala | Pro | Thr |
| Thr | | Laze | Glu | Dro | חות | | The | πh∽ | Dwo | T | 780 | Dwo | 77. | Dage | T |
| 785 | | | | | 790 | | | | | 795 | | | | | 800 |
| | | | Pro | 805 | | | | | 810 | | | | | 815 | _ |
| | | | Pro 820 | | | | | 825 | | | | | 830 | | |
| Glu | Pro | Ala 835 | Pro | Thr | Thr | Pro | Lys 840 | Lys | Pro | Ala | Pro | Thr 845 | Thr | Pro | Glu |
| Thr | Pro 850 | Pro | Pro | Thr | Thr | Ser 855 | Glu | Val | Ser | Thr | Pro 860 | Thr | Thr | Thr | Lys |
| Glu 865 | Pro | Thr | Thr | Ile | His 870 | Lys | Ser | Pro | Asp | Glu 875 | Ser | Thr | Pro | Glu | Leu 880 |
| Ser | Ala | Glu | Pro | Thr 885 | | Lys | Ala | Leu | Glu 890 | | Ser | Pro | Lys | Glu 895 | |
| Gly | Val | Pro | Thr 900 | | Lys | Thr | Pro | Ala 905 | | Thr | Lys | Pro | Glu 910 | | Thr |
| Thr | Thr | Ala 915 | Lys | Asp | Lys | Thr | Thr 920 | | Arg | Asp | Leu | | | Thr | Pro |
| Glu | Thr 930 | | Thr | Ala | Ala | | | Met | Thr | Lys | | 925 Thr | Ala | Thr | Thr |
| Thr | | T | ሞኤ~ | Thr | C1 | 935 | T | т1 - | mla sa | 77- | 940 | ml | m1 | ~ 1 | **- 3 |
| 945 | | | Thr | | 950 | | | | | 955 | | | | | 960 |
| | | | Thr | 965 | | | | | 970 | | - | | | 975 | |
| | | | Thr 980 | | | | | 985 | | | | | 990 | | |
| Thr | Thr | Thr 995 | Glu | Ile | Met | | Lys 1000 | Pro | Glu | Glu | | Ala 1005 | Lys | Pro | Lys |
| Asp | Arg | Ala | Thr | Asn | Ser | Lys | Ala | Thr | Thr | Pro | Lys | Pro | Gln | Lys | Pro |
| | 1010 | _ | | | | L 01 5 | | | | | 1020 | | | | |
| Thr | Lys | Ala | Pro | Lys | Lys | Pro | Thr | Ser | Thr | Lys | Lys | Pro | Lys | Thr | Met |

1035 1025 1030 Pro Arg Val Arg Lys Pro Lys Thr Thr Pro Thr Pro Arg Lys Met Thr 1045 1050 1055 Ser Thr Met Pro Glu Leu Asn Pro Thr Ser Arg Ile Ala Glu Ala Met 1060 1065 1070 Leu Gln Thr Thr Thr Arg Pro Asn Gln Thr Pro Asn Ser Lys Leu Val 1075 1080 1085 Glu Val Asn Pro Lys Ser Glu Asp Ala Gly Gly Ala Glu Gly Glu Thr 1090 1095 1100 Pro His Met Leu Leu Arg Pro His Val Phe Met Pro Glu Val Thr Pro 1105 1110 1115 1120 Asp Met Asp Tyr Leu Pro Arg Val Pro Asn Gln Gly Ile Ile Asn 1125 1130 Pro Met Leu Ser Asp Glu Thr Asn Ile Cys Asn Gly Lys Pro Val Asp 1140 1145 Gly Leu Thr Thr Leu Arg Asn Gly Thr Leu Val Ala Phe Arg Gly His 1155 1160 1165 Tyr Phe Trp Met Leu Ser Pro Phe Ser Pro Pro Ser Pro Ala Arg Arg 1170 1175 1180 Ile Thr Glu Val Trp Gly Ile Pro Ser Pro Ile Asp Thr Val Phe Thr 1185 1190 1195 1200 Arg Cys Asn Cys Glu Gly Lys Thr Phe Phe Phe Lys Asp Ser Gln Tyr 1205 1210 1215 Trp Arg Phe Thr Asn Asp Ile Lys Asp Ala Gly Tyr Pro Lys Pro Ile 1220 1225 1230 Phe Lys Gly Phe Gly Gly Leu Thr Gly Gln Ile Val Ala Ala Leu Ser 1245 1235 1240 Thr Ala Lys Tyr Lys Asn Trp Pro Glu Ser Val Tyr Phe Phe Lys Arg 1250 1255 1260 Gly Gly Ser Ile Gln Gln Tyr Ile Tyr Lys Gln Glu Pro Val Gln Lys 1265 1270 1275 1280 Cys Pro Gly Arg Arg Pro Ala Leu Asn Tyr Pro Val Tyr Gly Glu Thr 1290 Asp Thr Gly * 1299

<210> 1848 <211> 103 <212> PRT <213> Homo sapiens

<400> 1848

Met Asn Pro Ala Val Arg Gln Arg Cys Leu Leu Phe Cys Phe Gln Gln 1 5 10 Lys Leu Ile Leu Ser His Phe Phe Leu Leu Gln Val Pro Gln Trp Cys 25 20 Ala Glu Tyr Cys Leu Ser Ile His Tyr Gln His Gly Gly Val Ile Cys 40 Thr Gln Val His Lys Gln Thr Val Val Gln Leu Ala Leu Arg Val Ala 55 Asp Glu Met Asp Val Asn Ile Gly His Glu Val Gly Tyr Val Ile Pro 70 75 Phe Glu Asn Cys Cys Thr Asn Glu Thr Ile Leu Arg Leu Val Cys Gly 90 95 85 Val Gln Ser Ala Pro Cys * 100 102

```
<210> 1849
    <211> 50
    <212> PRT
    <213> Homo sapiens
    <400> 1849
Met Ser Arg Phe Leu Leu Pro Arg Glu Gly Cys Leu Leu Ile Val Phe
           5
                  10
Met Leu Cys Glu Lys Thr Leu Pro Phe Leu Phe Thr Leu Lys Glu Tyr
                  25
       20
Thr Phe Ile Pro Glu His Arg Thr Thr Asp Ile Asn Cys Val Asn Thr
                        40
His Glu
    <210> 1850
    <211> 84
    <212> PRT
    <213> Homo sapiens
    <400> 1850
Met Arg Leu His Ser Lys Gly Ser Gln Asp Pro Ser Thr Lys Val His
Ile Lys Ala Leu Gln Thr Val Thr Ser Phe Leu Met Leu Phe Ala Ile
   20
                 25
Tyr Phe Leu Cys Ile Ile Thr Ser Thr Trp Asn Leu Arg Thr Gln Gln
 . 35 40
Ser Lys Leu Val Leu Leu Cys Gln Thr Val Ala Ile Met Tyr Pro
 50 55
                                   60
Ser Phe His Ser Phe Ile Leu Ile Met Gly Ser Arg Lys Leu Lys Gln
Thr Phe Leu Ser
       84
    <210> 1851
    <211> 51
    <212> PRT
    <213> Homo sapiens
   <400> 1851
Met Ala Ala Cys Lys Leu Leu Lys His Leu Asn Gly Phe Ser Leu Leu
 1 . 5
                               10
Leu Pro Arg Leu Glu Cys Asn Gly Val Ile Ser Val His Cys Asn Pro
          20
                            25
Leu Pro Pro Gly Phe Lys Arg Phe Ser Cys Pro Ser Leu Leu Ser Ser
       35
Trp Asp *
   50
```

```
<210> 1852
    <211> 54
    <212> PRT
    <213> Homo sapiens
   <400> 1852
Met Lys Thr Lys Cys Lys Pro Asn Ile Thr Phe Phe Asn Thr Ile Ile
1 5
                             10
Cys Phe Phe Leu Thr Phe Leu Phe Cys Ile Tyr Ile Asp Ser Leu Leu
      20 25
Cys Thr Val Pro Lys Asn Pro Ala Gln Ala Val Gln Leu Asn Arg Asp
      35
                    40
His Thr Lys Val His *
   50 53
    <210> 1853
    <211> 129
    <212> PRT
   <213> Homo sapiens
  <400> 1853
Met Ala Val Val Arg Val Met Val Val Val Arg Val Thr Ala Val Val
                             10
Arg Val Met Val Val Arg Val Val Val Arg Val Met Val Val
Val Arg Ile Thr Ala Val Leu Arg Val Met Val Val Arg Ile Met
      35 40
Ala Val Ile Arg Val Met Val Val Val Arg Val Thr Ala Ile Val Gly
 50 . 55
                           60
Val Met Val Val Ile Arg Val Thr Ala Ile Val Ser Ile Met Val Val
                       75 80
                70
Val Arg Val Met Val Val Val Arg Val Met Val Val Ala Arg Pro Met
Val Val Val Arg Val Met Ala Val Val Arg Val Met Ala Asp Ser Ala
         100 105 110
Leu Arg Ala Ile Cys Ser Ser Ser Leu Asn Val Thr Phe Ser Leu Glu
                    120
                                    125 128
    <210> 1854
    <211> 190
    <212> PRT
    <213> Homo sapiens
```

<400> 1854

<221> misc_feature <222> (1)...(190)

<223> Xaa = any amino acid or nothing

Met Ser Cys Phe Gly Leu Leu Gly Gly Leu Thr Pro Arg Val Leu 10 Ser Thr Glu Glu Gln Leu Pro Pro Gly Phe Pro Ser Ile Asp Met Gly 25 Pro Gln Leu Lys Val Val Glu Lys Ala Arg Thr Ala Thr Met Leu Cys 40 Ala Ala Gly Gly Asn Pro Asp Pro Glu Ile Ser Trp Phe Lys Asp Phe 55 Leu Pro Val Asp Pro Ala Thr Ser Asn Gly Arg Ile Lys Gln Leu Arg 70 75 Ser Gly Glu Gln Arg Ala Gly Val Lys Gly Pro Cys Arg Pro Gln Asn Lys Arg Leu Val Arg Ser Gln His Ser Leu Leu Pro Trp Ala Trp Ala 105 Pro Pro Gly Leu Ser Gly Gly Tyr Leu Val Gly Trp Ala Gly Ser Tyr 120 Cys Arg Cys Ala Trp Leu Arg Glu Glu Ser Ser Trp Leu Ala Val Pro 135 Leu Pro Ser Ser Asp Cys Gln Thr Pro Asp Phe Gly Pro Val Leu Pro 150 155 Leu Pro Ala His Val Met Cys Gln Cys Gly Gly Leu Phe Lys Gly Ala 165 170 Leu Trp Met Leu Thr Leu Leu Pro Cys Xaa Leu Ala * 180 185

<210> 1855 <211> 78 <212> PRT

<213> Homo sapiens

<400> 1855

 Met Val Val Ser Ala
 Trp Ile Gly Leu Glu Ala
 Ala Thr Val Val Ala Ala
 Ala Ala Ala

 1
 5
 6
 10
 15

 Cys Leu Ala Leu Leu Gly Ser Val Val Arg Glu Thr Ser Thr Ser Ala
 30

 Ser Pro Thr Pro Ala Ala Leu Arg Ala Ala Trp Thr Val Tyr Ser Ser
 45

 Pro Met Thr Thr Cys Val Phe Ala Val Val Pro Leu Leu Ala Gly Thr
 55

 Val Lys Pro Ser Ser Met Cys Val Pro Arg Cys Pro Ala
 *

 65
 70

<210> 1856

<211> 67

<212> PRT

<213> Homo sapiens

<400> 1856

40 45 Thr Leu Met Gly Ser Glu Met Pro Met Ala Leu Ala Ala Glu Thr Trp 55 60 Leu Leu * 65 66

<210> 1857 <211> 107 <212> PRT <213> Homo sapiens

<400> 1857 Met Leu Leu Met Phe Leu Leu Ala Thr Cys Leu Leu Ala Ile Ile Phe 5 10 Val Pro Gln Glu Met Gln Thr Leu Arg Val Val Leu Ala Thr Leu Gly 20 25 Val Gly Ala Ala Ser Leu Gly Ile Thr Cys Ser Thr Ala Gln Glu Asn 40 Glu Leu Ile Pro Ser Ile Ile Arg Gly Arg Ala Thr Gly Ile Thr Gly 60 Asn Phe Ala Asn Ile Gly Gly Ala Leu Ala Ser Leu Val Met Ile Leu 70 75 Ser Ile Tyr Ser Arg Pro Leu Pro Trp Ile Ile Tyr Gly Val Phe Ala 85 90 Ile Leu Ser Gly Leu Val Val Leu Leu Pro

105 107

<210> 1858 <211> 134 <212> PRT

100

<213> Homo sapiens

<400> 1858 Met Ile Pro Pro Ala Ile Phe Trp Val Leu Ile Ile Phe Gly Trp Thr 1 5 10 15 Leu Val Tyr Gly Phe Val Tyr Phe Thr Thr Gly Glu Thr Ile Met Asp 20 25 Lys Leu Leu Arg Val Leu Tyr Trp Ile Leu Val Lys Thr Phe Phe Arg 40 45 Glu Ile Ser Val Ser His Gln Glu Arg Ile Pro Lys Asp Lys Pro Val 55 Met Leu Val Cys Ala Pro His Ala Asn Gln Phe Val Asp Gly Met Val 75 Ile Ser Thr His Leu Asp Arg Lys Val Tyr Phe Val Gly Ala Ala Ser 85 Ser Phe Arg Lys Tyr Lys Val Val Gly Leu Phe Met Lys Leu Met Ala 105 Ser Ile Ile Ser Gly Glu Arg His Gln Asp Val Lys Lys Val Leu Thr 115 120 Gly Met Ala Thr Glu Lys 130 134

<210> 1859 <211> 82 <212> PRT <213> Homo sapiens

<400> 1859

 Met
 Phe
 Tyr
 Val
 Lys
 Ala
 Glu
 Phe
 Leu
 Val
 Ser
 Cys
 Phe
 Trp
 Trp
 15

 Leu
 Thr
 Ala
 Cys
 Ala
 Leu
 Leu
 Met
 Ser
 Cys
 Ser
 Trp
 Phe
 Leu
 Thr
 Leu
 Asp
 Thr
 Leu
 Asp
 Asp

<210> 1860 <211> 46 <212> PRT <213> Homo sapiens

<400> 1860

 Met Pro Leu Ser Pro Leu Leu Phe His Leu Gly Pro Phe Pro Phe Lys

 1
 5
 10
 15

 Ala Glu Ser Trp Leu Asn Phe Leu Pro Pro Pro Pro Phe Pro Leu Leu
 20
 25
 30

 Pro Leu Leu Phe Leu Ala Lys Ala Glu Ile Gln Trp Ala *
 35
 40
 45

<210> 1861 <211> 128 <212> PRT <213> Homo sapiens

<400> 1861

Met Thr Ile Phe Phe Ser Leu Leu Val Leu Ala Ile Cys Ile Ile Leu 5 10 Val His Leu Leu Ile Arg Tyr Arg Leu His Phe Leu Pro Glu Ser Val 20 25 Ala Val Val Ser Leu Gly Ile Leu Met Gly Ala Val Ile Lys Ile Ile 40 Glu Phe Lys Lys Leu Ala Asn Trp Lys Glu Glu Met Phe Arg Pro 55 Asn Met Phe Phe Leu Leu Leu Pro Pro Ile Ile Phe Glu Ser Gly 70 75 Tyr Ser Leu His Lys Gly Asn Phe Phe Gln Asn Ile Gly Ser Ile Thr 8.5 90 Leu Phe Ala Val Phe Gly Thr Ala Ile Ser Ala Phe Val Val Gly Gly

100 105 110 110 105 110 110 Gly Ile Tyr Phe Leu Gly Gln Ala His Val Ile Ser Lys Leu Asn Met 115 120 125 128

<210> 1862 <211> 58 <212> PRT <213> Homo sapiens

<400> 1862 Trp Asp Met

<210> 1863 <211> 50 <212> PRT <213> Homo sapiens

<210> 1864 <211> 90 <212> PRT <213> Homo sapiens

Gly Val Glu Leu Leu Val Cys Ser Pro Leu Glu Ala Leu Gly Pro Leu 65 70 75 80
Leu Cys Leu Gly Glu Leu Gly Leu Gln Ala 85 90

<210> 1865 <211> 125 <212> PRT

<213> Homo sapiens

<400> 1865 Met Arg Leu Gly Leu Leu Leu Ala Arg His Trp Cys Ile Ala Gly 1 5 10 Val Phe Pro Gln Lys Phe Asp Gly Asp Ser Ala Tyr Val Gly Met Ser 20 25 Asp Gly Asn Pro Glu Leu Leu Ser Thr Ser Gln Thr Tyr Asn Gly Gln 40 Ser Glu Asn Asn Glu Asp Tyr Glu Ile Pro Pro Ile Thr Pro Pro Asn 55 60 Leu Pro Glu Pro Ser Leu Leu His Leu Gly Asp His Glu Ala Ser Tyr His Ser Leu Cys His Gly Leu Thr Pro Asn Gly Leu Leu Pro Ala Tyr 90 Ser Tyr Gln Ala Met Asp Leu Pro Ala Ile Met Val Ser Asn Met Leu 100 105 110 Ala Gln Asp Ser His Leu Leu Ser Gly Gln Leu Pro Thr 120

<210> 1866 <211> 129 <212> PRT <213> Homo sapiens

<400> 1866 Met Cys Phe Leu Asn Lys Leu Leu Leu Leu Ala Ala Leu Asp Trp Leu Phe Gln Ile Pro Thr Val Pro Glu Asp Leu Phe Phe Leu Glu Glu Gly 20 25 Pro Ser Tyr Ala Phe Glu Val Asp Thr Val Ala Pro Glu His Gly Leu 40 Asp Asn Ala Pro Val Val Asp Gln Gln Leu Leu Tyr Thr Cys Cys Pro 55 60 Tyr Ile Gly Glu Leu Arg Lys Leu Leu Ala Ser Trp Val Ser Gly Ser 70 75 Ser Gly Arg Ser Gly Gly Phe Met Arg Lys Ile Thr Pro Thr Thr 90 Thr Ser Leu Gly Ala Gln Pro Ser Gln Thr Ser Gln Gly Leu Gln Ala 105 Gln Leu Ala Gln Ala Phe Phe His Asn Gln Pro Pro Ser Leu Arg Arg 115 120 Thr 129

<210> 1867

<211> 80

<212> PRT

<213> Homo sapiens

<210> 1868 <211> 113 <212> PRT <213> Homo sapiens

70

<210> 1869 <211> 72 <212> PRT <213> Homo sapiens

<400> 1869
Met Phe Leu Trp Val Lys Arg Leu Leu Phe Ala Ala Ser Leu Leu Ala
1 5 10 15

<210> 1870 <211> 197 <212> PRT <213> Homo sapiens

<400> 1870 Met Arg Thr Leu Leu Thr Ile Leu Thr Val Gly Ser Leu Ala Ala His 10 Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe Gln Ser 20 Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro Glu Gly Thr 40 Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr Gly Glu Arg Asp 55 Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr Arg Lys Ser Cys Asn 70 75 Leu Thr Val Glu Thr Gly Asn Leu Thr Glu Leu Tyr Tyr Ala Arg Val 90 Thr Ala Val Ser Ala Gly Gly Arg Ser Ala Thr Lys Met Thr Asp Arg 105 110 Phe Ser Ser Leu Gln His Thr Thr Leu Lys Pro Pro Asp Val Thr Cys 115 120 125 Ile Ser Lys Val Arg Ser Ile Gln Met Ile Val His Pro Thr Pro Thr 130 135 140 Pro Ile Arg Ala Gly Asp Gly His Arg Leu Thr Leu Glu Asp Ile Phe 145 150 155 160 His Asp Leu Phe Tyr His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln 165 170 Met Val Ser Val Cys Cys Thr Leu Val Phe Leu Cys Leu Gly Ser Leu 185 Phe Pro Pro Asn * 195 196

<210> 1871 <211> 75 <212> PRT <213> Homo sapiens

35 40 45
Arg Glu Ser Arg Ala Cys Ala Pro Gly Glu Arg Pro Asn Phe Leu Gly
50 55 60
Ile Arg Glu Gln Arg Leu Thr Gly Leu Val Val
65 70 75

<210> 1872 <211> 84 <212> PRT <213> Homo sapiens

<400> 1872 Pro Phe Ser

 Met
 Pro
 Phe
 Ser
 Thr
 Cys
 Thr
 Ala
 Leu
 Pro
 Ser
 Trp
 Ala
 Leu
 Pro
 Ser
 Trp
 Thr
 Leu
 Ala
 Leu
 Ala
 Cly
 Ala
 Thr
 Leu
 Ala
 Thr
 Ala
 Thr
 Leu
 Ala
 Ilu
 Ilu
 Ala
 Ilu
 Ala
 Ilu
 Ala
 Ilu
 Ala
 Ilu
 Ala
 Ilu
 Ala
 Ilu
 Arg
 Ilu
 Arg</th

<210> 1873 <211> 51 <212> PRT <213> Homo sapiens

<210> 1874 <211> 503 <212> PRT <213> Homo sapiens

Glu Trp Met Leu Gln His Asp Leu Ile Pro Gly Asp Leu Arg Asp Leu 40 Arg Val Glu Pro Val Thr Thr Ser Val Ala Thr Gly Asp Tyr Ser Ile 55 Leu Met Asn Val Ser Trp Val Leu Arg Ala Asp Ala Ser Ile Arg Leu 70 75 Leu Lys Ala Thr Lys Ile Cys Val Thr Gly Lys Ser Asn Phe Gln Ser 90 Tyr Ser Cys Val Arg Cys Asn Tyr Thr Glu Ala Phe Gln Thr Gln Thr 105 Arg Pro Ser Gly Gly Lys Trp Thr Phe Ser Tyr Ile Gly Phe Pro Val 120 125 Glu Leu Asn Thr Val Tyr Phe Ile Gly Ala His Asn Ile Pro Asn Ala 135 Asn Met Asn Glu Asp Gly Pro Ser Met Ser Val Asn Phe Thr Ser Pro 150 155 Gly Cys Leu Asp His Ile Met Lys Tyr Lys Lys Cys Val Lys Ala 165 170 175 Gly Ser Leu Trp Asp Pro Asn Ile Thr Ala Cys Lys Asn Glu Glu 185 180 Thr Val Glu Val Asn Phe Thr Thr Pro Leu Gly Asn Arg Tyr Met 200 Ala Leu Ile Gln His Ser Thr Ile Ile Gly Phe Ser Gln Val Phe Glu 215 220 Pro His Gln Lys Lys Gln Thr Arg Ala Ser Val Val Ile Pro Val Thr 230 235 Gly Asp Ser Glu Gly Ala Thr Val Gln Leu Thr Pro Tyr Phe Pro Thr 245 250 255 Cys Gly Ser Asp Cys Ile Arg His Lys Gly Thr Val Val Leu Cys Pro 260 265 Gln Thr Gly Val Pro Phe Pro Leu Asp Asn Asn Lys Ser Lys Pro Gly 280 Gly Trp Leu Pro Leu Leu Leu Ser Leu Leu Val Ala Thr Trp Val 295 Leu Val Ala Gly Ile Tyr Leu Met Trp Arg His Glu Arg Ile Lys Lys 310 315 Thr Ser Phe Ser Thr Thr Thr Leu Leu Pro Pro Ile Lys Val Leu Val 325 330 Val Tyr Pro Ser Glu Ile Cys Phe His His Thr Ile Cys Tyr Phe Thr 345 Glu Phe Leu Gln Asn His Cys Arg Ser Glu Val Ile Leu Glu Lys Trp 360 Gln Lys Lys Lys Ile Ala Glu Met Gly Pro Val Gln Trp Leu Ala Thr 375 380 Gln Lys Lys Ala Ala Asp Lys Val Val Phe Leu Leu Ser Asn Asp Val 390 395 Asn Ser Val Cys Asp Gly Thr Cys Gly Lys Ser Glu Gly Ser Pro Ser 405 410 Glu Asn Ser Gln Asp Leu Phe Pro Leu Ala Phe Asn Leu Phe Cys Ser 420 425 Asp Leu Arg Ser Gln Ile His Leu His Lys Tyr Val Val Val Tyr Phe 440 Arg Glu Ile Asp Thr Lys Asp Asp Tyr Asn Ala Leu Ser Val Cys Pro 455 460 Lys Tyr His Leu Met Lys Asp Ala Thr Ala Phe Cys Ala Glu Leu Leu 470 475 His Val Lys Gln Gln Val Ser Ala Gly Lys Arg Ser Gln Ala Cys His 485 490 Asp Gly Cys Cys Ser Leu *

500 502

<210> 1875

<211> 158

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(158)

<223> Xaa = any amino acid or nothing

<400> 1875

Met Xaa Pro Pro Thr Arg Pro Arg Thr Arg Gly Val Gly Ile Phe Tyr 10 Phe Val Ile Tyr Ile Ile Ile Ser Phe Leu Val Val Val Asn Met Tyr 20 25 Ile Ala Val Ile Leu Glu Asn Phe Ser Val Ala Thr Glu Glu Ser Thr 40 Glu Pro Leu Ser Glu Asp Asp Phe Glu Met Phe Tyr Glu Val Trp Glu 55 Lys Phe Asp Pro Asp Ala Thr Gln Phe Ile Glu Phe Ser Lys Leu Ser 75 70 Asp Phe Ala Ala Ala Leu Asp Pro Pro Leu Leu Ile Ala Lys Pro Asn 90 Lys Val Gln Leu Ile Ala Met Asp Leu Pro Met Val Ser Gly Asp Arg 100 105 Ile His Cys Leu Asp Ile Leu Phe Ala Phe Thr Lys Arg Val Leu Gly 115 · 120 Glu Ser Gly Glu Met Asp Ser Leu Arg Ser Gln Met Glu Glu Arg Phe 135 140

Met Ser Ala Asn Pro Ser Lys Val Ser Tyr Glu Pro Ile Thr

150

<210> 1876

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1876

Met Gly Asn Arg Ala Val Ile Ile Ala Arg Gln Leu Ser Ser Val His Thr Leu Ile Cys Asn Phe Phe Trp Leu Leu Leu Arg Thr Thr Gly Gly 20 25 Asp Leu Asp Ser Leu Lys Cys Ser Tyr Glu Ser Ile Gly Leu Asn Ser 40 Ile Ser Thr His Glu Phe Ile Cys Thr Trp Gln Arg Arg Leu Asn Phe 55 60 Ser Phe Val Met Ser Phe Lys Pro Leu Phe Arg Ala Ser Pro His Ser 70 75 Tyr Leu Leu Ile Ile Gly Ser Gln Leu His Glu Thr Phe Asn Leu Gly 90 Ser Ile Ser Ser Glu Glu Lys Cys Ser * 100

```
<210> 1877
    <211> 241
    <212> PRŤ
    <213> Homo sapiens
    <221> misc_feature
    <222> (1)...(241)
    <223> Xaa = any amino acid or nothing
    <400> 1877
Met Leu Trp Ala Leu Trp Pro Arg Trp Leu Ala Asp Lys Met Leu Pro
        5
                                 10
Leu Leu Gly Ala Val Leu Leu Gln Lys Arg Glu Lys Arg Gly Pro Leu
          20
                      25
Trp Arg His Trp Arg Arg Glu Thr Tyr Pro Tyr Tyr Asp Leu Gln Val
                         40
Lys Val Leu Arg Ala Thr Asn Ile Arg Gly Thr Asp Leu Leu Ser Lys
                      55
                                       60
Ala Asp Cys Tyr Val Gln Leu Trp Leu Pro Thr Ala Ser Pro Ser Pro
Ala Gln Thr Arg Ile Val Ala Asn Cys Ser Asp Pro Glu Trp Asn Glu
              85
                                90
Thr Phe His Tyr Gln Ile His Gly Ala Val Lys Asn Val Leu Glu Leu
         100
                            105
Thr Leu Tyr Asp Lys Asp Ile Leu Gly Ser Asp Gln Leu Ser Leu Leu
                        120
                                 125
Leu Phe Asp Leu Arg Ser Leu Lys Cys Gly Gln Pro His Lys His Thr
                    135
                                      140
Phe Pro Leu Asn His Gln Asp Ser Gln Glu Leu Gln Val Glu Phe Val
                                  155
Leu Glu Lys Ser Gln Glu Pro Ala Ser Glu Val Ile Thr Asn Gly Val
      165 170 175
Leu Gly Ala His Pro Trp Leu Arg Met Lys Gly Met Ile Leu Gly Glu
                            185
Gly Arg Ala Pro Arg Gln Gln His Gly Gln Ser Trp Glu Gly Gly Val
                        200
Gly Pro Ser Pro Leu Ser Xaa Xaa Xaa Asn Thr Gly Gly Lys Ile Val
  210 215
                             220
Gly Phe Trp Glu Glu Met Ala Asn Gly Thr Gly Ala Pro Pro Arg Pro
225
                230
                                    235
Pro
241
    <210> 1878
    <211> 50
    <212> PRT
    <213> Homo sapiens
```

<400> 1878

Met Leu Leu Met Leu Leu Phe Arg Cys Cys Ser Ser Lys Asp Leu Trp

1 5 10 15

Pro Val Leu Ile Ala His Leu Val Pro Gln Gly Gly Gln Glu Gly Asn

```
20
                              25
Val Gly Glu Gln Thr Lys Gly Lys Ser Asn Arg Val Leu Pro Val Phe
                          40
Leu *
49
    <210> 1879
    <211> 56
    <212> PRT
    <213> Homo sapiens
    <400> 1879
Met Cys Ser Ala Phe Ser Ser Phe Trp Trp Val Pro Pro Leu Ala Gly
               5
                                 10
Ser Gly Val Lys Leu Gln Thr Phe Thr Ala Ser Val Thr Ala His Lys
           20
                              25
Arg Ser Thr Asp Pro Lys Ser Glu Gln Gln Leu Asp Leu Ser Gln Arg
       35
                          40
Thr Lys Glu Gln Ser Leu Thr Lys
 50
                      55 56
    <210> 1880
    <211> 161
    <212> PRT
    <213> Homo sapiens
    <221> misc feature
    <222> (1) ... (161)
    <223> Xaa = any amino acid or nothing
    <400> 1880
Met Pro Ser Ala Ser Leu Leu Val Asn Leu Leu Ser Ala Leu Leu Ile
 1 5
Leu Phe Val Phe Gly Glu Thr Glu Ile Arg Phe Thr Gly Gln Thr Glu
Phe Val Val Asn Glu Thr Ser Thr Thr Val Ile Arg Leu Ile Ile Glu
                          40
Arg Ile Gly Glu Pro Ala Asn Val Thr Ala Ile Val Ser Leu Tyr Gly
                       55
Glu Asp Ala Gly Asp Phe Phe Asp Thr Tyr Ala Ala Ala Phe Ile Pro
                   70
                                   75
Ala Gly Glu Thr Asn Arg Thr Val Tyr Ile Ala Val Cys Asp Asp Asp
Leu Pro Glu Pro Asp Glu Thr Phe Ile Phe His Leu Thr Leu Gln Lys
                             105
Pro Ser Ala Asn Val Lys Leu Gly Trp Pro Arg Thr Val Thr Val Thr
                          120
Ile Leu Ser Asn Gly Gln Met Ala Phe Trp Glu Phe Ile Phe Ile Leu
  130 135
                              140
Asn Ile Gly Leu Pro Pro Pro Ile Pro Pro Ser Gly Xaa Leu Lys Ala
                 150
                          155 ·
```

Pro 161

<210> 1881 <211> 130 <212> PRT <213> Homo sapiens

<400> 1881 Met Gly Ile Tyr Gln Met Tyr Leu Cys Phe Leu Leu Ala Val Leu Leu 10 Gln Leu Tyr Val Ala Thr Glu Ala Ile Leu Ile Ala Leu Val Gly Ala 25 Thr Pro Ser Tyr His Trp Asp Leu Ala Glu Leu Leu Pro Asn Gln Ser His Gly Asn Gln Ser Ala Gly Glu Asp Gln Ala Phe Gly Asp Trp Leu Leu Thr Ala Asn Gly Ser Glu Ile His Lys His Val His Phe Ser Ser 70 Ser Phe Thr Ser Ile Ala Ser Glu Trp Phe Leu Ile Ala Asn Arg Ser 85 90 Tyr Lys Val Ser Ala Ala Ser Ser Phe Phe Phe Ser Gly Val Phe Val 100 . 105 Gly Val Ile Ser Phe Gly Gln Leu Ser Asp Arg Phe Gly Arg Lys 120 Val Tyr 130

<210> 1882 <211> 108 <212> PRT <213> Homo sapiens

<400> 1882 Met Leu Trp Phe Ser Gly Val Gly Ala Leu Ala Glu Arg Tyr Cys Arg 5 10 Arg Ser Pro Gly Ile Thr Cys Cys Val Leu Leu Leu Leu Asn Cys Ser 20 25 Gly Val Pro Met Ser Leu Ala Ser Ser Phe Leu Thr Gly Ser Val Ala 40 Lys Cys Glu Asn Glu Gly Glu Val Leu Gln Ile Pro Phe Ile Thr Asp Asn Pro Cys Ile Met Cys Val Cys Leu Asn Lys Glu Val Thr Cys Lys 70 Arg Glu Lys Cys Pro Val Leu Ser Arg Asp Cys Ala Leu Ala Ile Lys 85 90 Gln Arg Gly Ala Cys Cys Glu Gln Cys Lys Gly Cys 105

<210> 1883 <211> 88 <212> PRT <213> Homo sapiens

<400> 1883 Met Leu Phe Tyr Leu Val Ser Val Cys Leu Cys Val Ala Val Ile Val 1 5 10 Ala Phe Gln Leu Thr Ala Phe Thr Phe Arg Lys Asn Leu Ala Ala Thr 25 Ala Leu Leu Ser Leu Phe Gly Tyr Ala Thr Leu Pro Trp Met Tyr 35 40 Leu Met Ser Arg Ile Phe Ser Ser Ser Asp Val Ala Phe Ile Ser Tyr 55 60 Val Ser Leu Asn Phe Ile Phe Gly Leu Cys Thr Met Leu Ile Thr Ile 70 75 Met Pro Arg Leu Leu Ala Ile Ile 85 88

<210> 1884 <211> 116 <212> PRT <213> Homo sapiens

<400> 1884 Met Cys Trp Ala Arg Cys Trp Thr Arg Trp Asn Thr Cys Thr Ile Trp 10 Thr Ser Ser Thr Asp Pro Phe Arg Lys Cys Trp Met Ala Pro Glu Ala 25 Leu Asn Phe Ser Phe Ser His Lys Ser Asp Ile Trp Ser Leu Gly Cys 35 40 Ile Ile Leu Asp Met Thr Ser Cys Ser Phe Met Asp Gly Thr Glu Ala 50 55 60 Met His Leu Arg Lys Ser Leu Arg Gln Ser Pro Gly Ser Leu Lys Ala 70 75 Val Leu Lys Thr Met Glu Glu Lys Gln Ile Pro Asp Val Glu Thr Phe Arg Asn Leu Leu Pro Leu Met Leu Gln Ile Asp Pro Ser Asp Arg Ile 105 Thr Ile Lys * 115

<210> 1885 <211> 115 <212> PRT <213> Homo sapiens

Gln Thr Val Lys Cys Ser Cys Phe Ser Gly Gln Val Ala Gly Thr Thr 65 70 75 80

Arg Ala Lys Pro Ser Cys Val Asp Asp Leu Leu Leu Ala Ala His Cys 90 95

Ala Arg Arg Asp Pro Arg Ala Ala Leu Arg Leu Leu Leu Pro Gln Pro 100 105 110

Pro Ser Ser 115

<210> 1886 <211> 357 <212> PRT <213> Homo sapiens

<400> 1886 Met Ile Leu Ser Leu Leu Phe Ser Leu Gly Gly Pro Leu Gly Trp Gly 5 10 Leu Leu Gly Ala Trp Ala Gln Ala Ser Ser Thr Ser Leu Ser Asp Leu 20 25 Gln Ser Ser Arg Thr Pro Gly Val Trp Lys Ala Glu Ala Glu Asp Thr Gly Lys Asp Pro Val Gly Arg Asn Trp Cys Pro Tyr Pro Met Ser Lys 55 Leu Val Thr Leu Leu Ala Leu Cys Lys Thr Glu Lys Phe Leu Ile His 70 Ser Gln Gln Pro Cys Pro Gln Gly Ala Pro Asp Cys Gln Lys Val Lys 85 90 Val Met Tyr Arg Met Ala His Lys Pro Val Tyr Gln Val Lys Gln Lys 105 Val Leu Thr Ser Leu Ala Trp Arg Cys Cys Pro Gly Tyr Thr Gly Pro 115 120 Asn Cys Glu His His Asp Ser Met Ala Ile Pro Glu Pro Ala Asp Pro 135 140 Gly Asp Ser His Gln Glu Pro Gln Asp Gly Pro Val Ser Phe Lys Pro 150 155 Gly His Leu Ala Ala Val Ile Asn Glu Val Glu Val Gln Gln Glu Gln 170 Gln Glu His Leu Leu Gly Asp Leu Gln Asn Asp Val His Arg Val Ala 185 Asp Ser Leu Pro Gly Leu Trp Lys Ala Leu Pro Gly Asn Leu Thr Ala 200 Ala Val Met Glu Ala Asn Gln Thr Gly His Glu Phe Pro Asp Arg Ser 215 220 Leu Glu Gln Val Leu Pro His Val Asp Thr Phe Leu Gln Val His 230 235 Phe Ser Pro Ile Trp Arg Ser Phe Asn Gln Ser Leu His Ser Leu Thr 245 250 . Gln Ala Ile Arg Asn Leu Ser Leu Asp Val Glu Ala Asn Arg Gln Ala 265 Ile Ser Arg Val Gln Asp Ser Ala Val Ala Arg Ala Asp Phe Gln Glu 280 285 Leu Gly Ala Lys Phe Glu Ala Lys Val Gln Glu Asn Thr Gln Arg Val 295 300 Gly Gln Leu Arg Gln Asp Val Glu Asp Arg Leu His Ala Gln His Phe 310 315 Thr Leu His Arg Ser Ile Ser Glu Leu Gln Ala Asp Val Asp Thr Lys

 Leu Lys Arg
 Leu His Lys Ala Gln Glu Ala Pro Gly Thr Asn Gly Ser

 Leu Val Leu Slu Arg
 335

 340
 345

 350
 350

<210> 1887 <211> 86 <212> PRT <213> Homo sapiens

<210> 1888 <211> 48 <212> PRT <213> Homo sapiens

<210> 1889 <211> 79 <212> PRT <213> Homo sapiens

Asn Gln Thr Phe Leu Cys Leu Leu Ser Thr Thr Ala Phe Gly Gln Gly
50 55 60

Val Phe Phe Ile Thr Phe Leu Glu Gly Gln Glu Thr Gly Ile His
65 70 75 79

<210> 1890 <211> 251 <212> PRT <213> Homo sapiens

<400> 1890 Met Asn Val Ile Tyr Phe Pro Leu His Leu Phe Val Val Tyr Ser Arg 1 5 10 Ala Tyr Thr Ser Leu Val Leu Val Gly Cys Thr Asn Leu Cys Ala Val 20. 25 Leu Phe Ala Arg Cys Leu Asp Asp His Leu Val Ser Leu Arg Met Ser 40 Gly Ser Arg Lys Glu Phe Asp Val Lys Gln Ile Leu Lys Ile Arg Trp 55 Arg Trp Phe Gly His Gln Ala Ser Ser Pro Asn Ser Thr Val Asp Ser Gln Gln Gly Glu Phe Trp Asn Arg Gly Gln Thr Gly Ala Asn Gly Gly 85 90 Arg Lys Phe Leu Asp Pro Cys Ser Leu Gln Leu Pro Leu Ala Ser Ile 100 105 110 Gly Tyr Arg Arg Ser Ser Gln Leu Asp Phe Gln Asn Ser Pro Ser Trp 115 120 125 Pro Met Ala Ser Thr Ser Glu Val Pro Ala Phe Glu Phe Thr Ala Glu 135 140 Asp Cys Gly Gly Ala His Trp Leu Asp Arg Pro Glu Val Asp Asp Gly 150 155 Thr Ser Glu Glu Glu Asn Glu Ser Asp Ser Ser Ser Cys Arg Thr Ser 165 170 . 175 Asn Ser Ser Gln Thr Leu Ser Ser Cys His Thr Met Glu Pro Cys Thr 180 185 190 Ser Asp Glu Phe Phe Gln Ala Leu Asn His Ala Glu Gln Thr Phe Lys 200 205 Lys Met Glu Asn Tyr Leu Arg His Lys Gln Leu Cys Asp Val Ile Leu 210 215 220 Val Ala Gly Asp Arg Arg Ile Pro Ala His Arg Leu Val Leu Ser Ser 230 235

<210> 1891 <211> 117 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(117) <223> Xaa = any amino acid or nothing

Val Ser Asp Tyr Phe Ala Gly Met Phe Thr Asn

245

<400> 1891 Met Leu Ile Asp Val Phe Phe Phe Leu Phe Leu Phe Ala Xaa Trp Met 10 Val Ala Phe Gly Val Ala Arg Gln Gly Ile Leu Arg Gln Asn Glu Gln 25 Arg Trp Arg Trp Ile Phe Arg Ser Val Ile Tyr Glu Pro Tyr Leu Ala 40 Met Phe Gly Gln Val Pro Ser Asp Val Asp Gly Thr Thr Tyr Asp Phe 55 60 Ala His Cys Thr Phe Thr Gly Asn Glu Ser Lys Pro Leu Cys Val Glu 70 75 Leu Asp Glu His Asn Leu Pro Arg Phe Pro Glu Trp Ile Thr Ile Pro 90 Leu Val Cys Ile Tyr Met Leu Ser Thr Asn Ile Leu Leu Val Asn Leu 100 105 Leu Val Ala Met Phe 115 117

<210> 1892 <211> 103 <212> PRT <213> Homo sapiens

<400> 1892

Met Leu Cys His Pro His Val His His Leu Val Cys Leu Leu Ala Thr Leu Thr Phe Ser Leu Asn Ala Ser Cys Ala Glu Gln Thr Phe His 25 Ser Gln Gln Ser Asn Gly Glu Phe Met Ala Thr Leu Pro Ser Ile Ser 40 Lys Gln Phe Gly Val Ile Val Trp Lys Pro Gln Arg Lys Asp Val Ile 60 Arg Leu Pro Val Ala Leu Ser Phe Ser Ser Gly Ala Arg Leu Ala Phe 65 70 75 Thr Cys Leu Arg Lys Ile Ser Gly Phe Arg Ala Leu Ile Trp Gly Glu 85 90 Asp Lys Gly Trp Asp Leu * 100 102

<210> 1893 <211> 77 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(77) <223> Xaa = any amino acid or nothing

Ala Leu Val Phe Leu Leu Leu Val Gly Leu Leu Asn Ala Arg Gly Ile
35 40 45

Lys Glu Ser Met Arg Ala Xaa Val Val Met Thr Val Val Glu Val Thr
50 55 60

Gly Leu Val Leu Val Val Val Leu Ala Leu Val Pro Gly
65 70 75 77

<210> 1894 <211> 46 <212> PRT <213> Homo sapiens

<210> 1895 <211> 162 <212> PRT <213> Homo sapiens

<400> 1895 Met Thr Ala Trp Arg Arg Phe Gln Ser Leu Leu Leu Leu Gly Leu 10 Leu Val Leu Cys Ala Arg Leu Leu Thr Ala Ala Lys Gly Gln Asn Cys 25 Gly Gly Leu Val Gln Gly Pro Asn Gly Thr Ile Glu Ser Pro Gly Phe 35 40 Pro His Gly Tyr Pro Asn Tyr Ala Asn Cys Thr Trp Ile Ile Ile Thr 50 55 60 Gly Glu Arg Asn Arg Ile Gln Leu Ser Phe His Thr Phe Ala Leu Glu 70 75 80 Glu Asp Phe Asp Ile Leu Ser Val Tyr Asp Gly Gln Pro Gln Gln Gly · 85 90 Asn Leu Lys Val Arg Leu Ser Gly Phe Gln Leu Pro Ser Ser Ile Val 105 110 100 Ser Thr Gly Ser Ile Leu Thr Leu Trp Phe Thr Thr Asp Phe Ala Val 115 120 125 Ser Ala Gln Gly Phe Lys Ala Leu Tyr Glu Gly Arg Arg Leu Val Val 135 140 Phe Cys Thr Cys Ile His Cys Pro Asn Asp Leu Ile His Ala Thr Leu 150 Asp *

<210> 1896 <211> 60

<212> PRT <213> Homo sapiens

<400> 1896

Met Leu Ser Leu Pro Cys Gly Trp Leu Cys Thr Ala Ile Gly Leu Pro 1 15

Thr Met Phe Gly Tyr Ile Ile Cys Gly Val Leu Leu Gly Pro Ser Gly 25 25 30

Leu Asn Ser Ile Lys Val Arg Thr Lys Leu Asp Cys Phe Gly Ile Cys 45

Leu Thr Glu Tyr Lys Lys Arg Ile His Glu Asp * 50

<210> 1897 <211> 49 <212> PRT <213> Homo sapiens

<400> 1897

 Met
 Leu
 Ile
 Val
 Gln
 Phe
 Ile
 Phe
 Glu
 Leu
 Val
 Ser
 Ile
 Leu
 Val

 Ser
 Asn
 Val
 Lys
 Asp
 Met
 Leu
 Asp
 Phe
 Glu
 Ser
 Gly
 Phe
 Cys
 Ser
 Lys

 Ile
 Leu
 Ser
 Tyr
 Phe
 Phe
 Ser
 Ser
 Pro
 Arg
 Tyr
 Arg
 Leu
 Pro
 Phe
 Leu

 35
 48
 48
 48
 45
 48

<210> 1898 <211> 52 <212> PRT <213> Homo sapiens

<400> 1898
Met Thr Trp Ala Gly Leu Phe Leu Phe Leu Arg Val Gly Ser Pro Asn

1 5 10 15

Arg Lys Trp Ala Ala Ser Gly Gly Ser Gly Gly Asp Gly Val Asp Gly
20 25 30

Glu Asp Trp Ser Leu Ala Arg Ser His Pro Gln Ser Pro Leu Leu Leu 35 40

Leu Leu Leu *

<210> 1899 <211> 112 <212> PRT <213> Homo sapiens

<400> 1899

<210> 1900 <211> 128 <212> PRT <213> Homo sapiens

<400> 1900 Met Arg Val Tyr Gly Thr Cys Thr Leu Val Leu Met Ala Leu Val Val 10 Phe Val Gly Val Lys Tyr Val Asn Lys Leu Ala Leu Val Phe Leu Ala 25 Cys Val Val Leu Ser Ile Leu Ala Ile Tyr Ala Gly Val Ile Lys Ser Ala Phe Asp Pro Pro Asp Ile Pro Val Cys Leu Leu Gly Asn Arg Thr 55 Leu Ser Arg Arg Ser Phe Asp Ala Cys Val Lys Ala Tyr Gly Ile His 70 75 Asn Asn Ser Ala Thr Ser Ala Leu Trp Gly Leu Phe Cys Asn Gly Ser 90 95 Gln Pro Ser Ala Ala Cys Asp Glu Tyr Phe Ile Gln Asn Asn Val Thr 105 Glu Ile Gln Gly Ile Pro Gly Ala Ala Ser Gly Val Phe Leu Glu Asn 120 125

<210> 1901 <211> 68 <212> PRT

<213> Homo sapiens

<400> 1901

35 40 45

Leu Asn Thr Val Cys Ala Tyr Asp Pro Val Glu Tyr Gly Ile Pro Tyr
50 55 60

Asn His Leu Tyr
65 68

<210> 1902 <211> 127 <212> PRT <213> Homo sapiens

<400> 1902 Met Tyr Phe Ser Ser Leu Phe Pro Tyr Val Val Leu Ala Cys Phe Leu 5 10 Val Arg Gly Leu Leu Arg Gly Ala Val Asp Gly Ile Leu His Met 25 Phe Thr Pro Lys Leu Asp Lys Met Leu Asp Pro Gln Val Trp Arg Glu Ala Ala Thr Gln Val Phe Ser Ala Leu Gly Leu Gly Phe Gly Val 55 Ile Ala Phe Ser Ser Tyr Asn Lys Gln Asp Asn Asn Cys His Phe Asp 70 75 Ala Ala Leu Val Ser Phe Ile Asn Phe Phe Thr Ser Val Leu Ala Thr 85 90 . 95 Leu Val Val Phe Ala Val Leu Gly Phe Lys Ala Asn Ile Met Asn Glu 105 110 Lys Cys Val Val Glu Asn Ala Glu Lys Ile Leu Gly Tyr Arg Val 120

<210> 1903 <211> 83 <212> PRT <213> Homo sapiens

<210> 1904 <211> 129 <212> PRT

<213> Homo sapiens

<400> 1904 Met Lys Met Phe Val Ala His Gly Phe Tyr Ala Ala Lys Phe Val Val 1 5 10 Ala Ile Gly Ser Val Ala Gly Leu Thr Val Ser Leu Leu Gly Ser Leu 25 20 Phe Pro Met Pro Arg Val Ile Tyr Ala Met Ala Gly Asp Gly Leu Leu 40 Phe Arg Phe Leu Ala His Val Ser Ser Tyr Thr Glu Thr Pro Val Val 55 60 Ala Cys Ile Val Ser Gly Phe Leu Ala Ala Leu Leu Ala Leu Leu Val 75 80 Ser Leu Arg Asp Leu Ile Glu Met Met Ser Ile Gly Thr Leu Leu Ala Tyr Thr Leu Val Ser Val Cys Val Leu Leu Leu Arg His His Pro Glu 100 105 110 Ser Asp Ile Asp Gly Phe Val Lys Phe Leu Ser Glu Glu His Thr Cys 120 Ser 129

<210> 1905 <211> 93 <212> PRT <213> Homo sapiens

<400> 1905

Met Gly Leu Leu Met Met Ile Leu Gly Gln Ile Phe Leu Asn Gly Asn 10 Gln Ala Lys Glu Ala Glu Ile Trp Glu Met Leu Trp Arg Met Gly Val 20 25 Gln Arg Glu Arg Arg Leu Ser Ile Phe Gly Asn Pro Lys Arg Leu Leu 45 40 Ser Val Glu Phe Val Trp Gln Arg Tyr Leu Asp Tyr Arg Pro Val Thr 55 60 Asp Cys Lys Pro Val Glu Tyr Glu Phe Phe Trp Gly Pro Arg Ser His 70 Leu Glu Thr Thr Lys Met Lys Ile Leu Lys Phe Met Ala 85 . 90

<210> 1906 <211> 66 <212> PRT <213> Homo sapiens

<400> 1906

Met Thr Ile Gly Phe Leu Phe Pro Met Leu Ser Ile Ala Tyr Leu Ile

1 5 10 15

Ser Pro Arg Ser Asn Leu Gly Leu Phe Ile Lys Lys Pro Phe Ile Lys

20 25 30

Phe Ile Cys His Thr Ala Ser Tyr Leu Thr Phe Leu Ser Met Leu Leu

35 40 45
Leu Ala Ser Gln His Ile Val Arg Thr Asp Leu His Val Gln Gly Pro
50 55 60
Cys Ile
65 66

<210> 1907 <211> 105 <212> PRT <213> Homo sapiens

<400> 1907 Met Leu Gln Leu Gly Pro Phe Leu Tyr Trp Thr Phe Leu Ala Ala Phe 5 1.0 Glu Gly Thr Val Phe Phe Phe Gly Thr Tyr Phe Leu Phe Gln Thr Ala 25 Ser Leu Glu Glu Asn Gly Lys Val Tyr Gly Asn Trp Thr Phe Gly Thr 40 Ile Val Phe Thr Val Leu Val Phe Thr Val Thr Leu Lys Leu Ala Leu 55 60 Asp Thr Arg Phe Trp Thr Trp Ile Asn His Phe Val Ile Trp Gly Ser 70 75 Leu Ala Phe Tyr Val Phe Phe Ser Phe Phe Trp Gly Gly Ile Ile Trp 85 Pro Phe Leu Lys Gln Gln Arg Met Ala 100

<210> 1908 <211> 46 <212> PRT <213> Homo sapiens

<210> 1909 <211> 139 <212> PRT <213> Homo sapiens

<210> 1910 <211> 104 <212> PRT <213> Homo sapiens

<400> 1910 Met Glu Gly Trp Phe Ala Val Leu Ser Thr Ala Asn Asp Val Leu Gly 10 Ala Pro Trp Asn Trp Leu Tyr Phe Ile Pro Leu Leu Ile Ile Gly Ala 25 Phe Phe Val Pro Thr Leu Val Leu Gly Val Leu Ser Gly Asp Phe Ala 35 Lys Glu Arg Glu Arg Val Glu Thr Arg Arg Ala Phe Met Lys Leu Arg 55 Arg Gln Gln Gln Ile Glu Arg Glu Leu Asn Gly Tyr Arg Val Trp Ile 70 75 Ala Lys Ala Glu Glu Val Met Leu Ala Glu Glu Asn Leu Tyr Pro Ser 85 His Ala Arg Pro Val Asn Pro * 100 103

<210> 1911 <211> 116 <212> PRT <213> Homo sapiens

85 90 95

Pro Phe Ile Ser Arg Thr Lys Ile Ala Gln Leu Lys Ser Gly Arg Asp
100 105 110

Ser Thr Val *
115

<210> 1912 <211> 105 <212> PRT <213> Homo sapiens

<400> 1912 Met Gln Leu Lys Thr Pro Ser Gly Gln Val Leu Ser Phe Cys Ile Leu 5 10 Gln Leu Phe Pro Phe Thr Ser Glu Ser Lys Arg Met Gly Val Ile Val 25 Arg Asp Glu Ser Thr Ala Glu Ile Thr Phe Tyr Met Lys Gly Ala Asp 40 Val Ala Met Ser Pro Ile Val Gln Tyr Asn Asp Trp Leu Glu Glu Glu Cys Gly Asn Met Ala Arg Glu Gly Leu Arg Thr Leu Val Val Ala Lys 70 75 Lys Ala Leu Thr Glu Glu Gln Tyr Gln Asp Phe Glu Ser Arg Tyr Thr 90 85 Gln Ala Lys Leu Ser Met His Thr Lys

<210> 1913 <211> 141 <212> PRT <213> Homo sapiens

<400> 1913 Met Leu Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn 1 5 10 15 Phe Phe Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu 25 Met Gly Phe Ser Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu 40 Gly Ile Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln Pro Gly Arg Gln Glu Ala Pro Ala Asp Pro Trp Ala Phe Leu 70 Lys Leu Leu Gly Cys Pro Cys Arg Arg Pro Gln Leu Thr Cys Pro 85 90 Ser Leu Arg Asn Ser Gln Asp Pro Ile Cys His Pro Arg Ser Ser Asp 100 105 Pro His Pro Gly Ala Arg Pro Lys Arg Leu Leu Ala Ala Ser Ile Leu 120 125 Pro Met Thr Pro Thr Trp Gly Arg Lys Asn Pro Ser *

<210> 1914 <211> 556 <212> PRT <213> Homo sapiens

<400> 1914 Met Lys Lys Val Leu Leu Leu Trp Lys Thr Val Leu Cys Thr Leu 10 Gly Gly Phe Glu Glu Leu Gln Ser Met Lys Ala Glu Lys Arg Ser Ile 20 25 Leu Gly Leu Pro Pro Leu Pro Glu Asp Ser Ile Lys Val Ile Arg Asn 40 Met Arg Ala Ala Ser Pro Pro Ala Ser Ala Ser Asp Leu Ile Glu Gln 55 Gln Gln Lys Arg Gly Arg Arg Glu His Lys Ala Leu Ile Lys Gln Asp 70 75 Asn Leu Asp Ala Phe Asn Glu Arg Asp Pro Tyr Lys Ala Asp Asp Ser 90 Arg Glu Glu Glu Glu Asn Asp Asp Asp Asn Ser Leu Glu Gly Glu 100 105 Thr Phe Pro Leu Glu Arg Asp Glu Val Met Pro Pro Pro Leu Gln His 120 125 Pro Gln Thr Asp Arg Leu Thr Cys Pro Lys Gly Leu Pro Trp Ala Pro 135 140 Lys Val Arg Glu Lys Asp Ile Glu Met Phe Leu Glu Ser Ser Arg Ser 150 155 Lys Phe Ile Gly Tyr Thr Leu Gly Ser Asp Thr Asn Thr Val Val Gly 165 170 Leu Pro Arg Pro Ile His Glu Ser Ile Lys Thr Leu Lys Gln His Lys 180 185 190 Tyr Thr Ser Ile Ala Glu Val Gln Ala Gln Met Glu Glu Glu Tyr Leu 195 200 205 Arg Ser Pro Leu Ser Gly Gly Glu Glu Glu Val Glu Gln Val Pro Ala 215 220 Glu Thr Leu Tyr Gln Gly Leu Leu Pro Ser Leu Pro Gln Tyr Met Ile 230 Ala Leu Leu Lys Ile Leu Leu Ala Ala Pro Thr Ser Lys Ala Lys 250 245 Thr Asp Ser Ile Asn Ile Leu Ala Asp Val Leu Pro Glu Glu Met Pro 265 . 270 Thr Thr Val Leu Gln Ser Met Lys Leu Gly Val Asp Val Asn Arg His 280 Lys Glu Val Ile Val Lys Ala Ile Ser Ala Val Leu Leu Leu Leu 295 300 Lys His Phe Lys Leu Asn His Val Tyr Gln Phe Glu Tyr Met Ala Gln 310 315 His Leu Val Phe Ala Asn Cys Ile Pro Leu Ile Leu Lys Phe Phe Asn 325 330 Gln Asn Ile Met Ser Tyr Ile Thr Ala Lys Asn Ser Ile Ser Val Leu 345 350 Asp Tyr Pro His Cys Val Val His Glu Leu Pro Glu Leu Thr Ala Glu 360 Ser Leu Glu Ala Gly Asp Ser Asn Gln Phe Cys Trp Arg Asn Leu Phe 375 380 Ser Cys Ile Asn Leu Leu Arg Ile Leu Asn Lys Leu Thr Lys Trp Lys 390 395

His Ser Arg Thr Met Met Leu Val Val Phe Lys Ser Ala Pro Ile Leu

405 410 Lys Arg Ala Leu Lys Val Lys Gln Ala Met Met Gln Leu Tyr Val Leu 425 430 Lys Leu Leu Lys Val Gln Thr Lys Tyr Leu Gly Arg Gln Trp Arg Lys 440 445 Ser Asn Met Lys Thr Met Ser Ala Ile Tyr Gln Lys Val Arg His Arg 455 460 Leu Asn Asp Asp Trp Ala Tyr Gly Asn Asp Leu Asp Ala Arg Pro Trp 470 475 Asp Phe Gln Ala Glu Glu Cys Ala Leu Arg Ala Asn Ile Glu Arg Phe 485 490 Asn Ala Arg Arg Tyr Asp Arg Ala His Ser Asn Pro Asp Phe Leu Pro 505 500 Val Asp Asn Cys Leu Gln Ser Val Leu Gly Gln Arg Val Asp Leu Pro 520 525 Glu Asp Phe Gln Met Asn Tyr Asp Leu Trp Leu Glu Arg Glu Val Phe 530 535 Ser Lys Pro Ile Ser Trp Glu Glu Leu Leu Gln * 550

<210> 1915 <211> 212 <212> PRT <213> Homo sapiens

<400> 1915 Met Phe Leu Val Ala Val Trp Trp Arg Phe Gly Ile Leu Ser Ile Cys 10 Met Leu Cys Val Gly Leu Val Leu Gly Phe Leu Ile Ser Ser Val Thr Phe Phe Thr Pro Leu Gly Asn Leu Lys Ile Phe His Asp Asp Gly Val 35 40 Phe Trp Val Thr Phe Ser Cys Ile Ala Ile Leu Ile Pro Val Val Phe 55 Met Gly Cys Leu Arg Ile Leu Asn Ile Leu Thr Cys Gly Val Ile Gly Ser Tyr Ser Val Val Leu Ala Ile Asp Ser Tyr Trp Ser Thr Ser Leu 85 90 Ser Tyr Ile Thr Leu Asn Val Leu Lys Arg Ala Leu Asn Lys Asp Phe 100 105 110 His Arg Ala Phe Thr Asn Val Pro Phe Gln Thr Asn Asp Phe Ile Ile 120 125 Leu Ala Val Trp Gly Met Leu Ala Val Ser Gly Ile Thr Leu Gln Ile 135 140 Arg Arg Glu Arg Gly Arg Pro Phe Phe Pro Pro His Pro Tyr Lys Leu 150 155 Trp Lys Gln Glu Arg Glu Arg Arg Val Thr Asn Ile Leu Asp Pro Ser 170 Tyr His Ile Pro Pro Leu Arg Glu Arg Leu Tyr Gly Arg Leu Thr Gln 185 Ile Lys Gly Leu Phe Gln Lys Glu Gln Pro Ala Gly Glu Arg Thr Pro 200 Leu Leu Leu * 210 211

<210> 1916 <211> 172 <212> PRT <213> Homo sapiens

<400> 1916 Met Cys Thr Pro Val Arg Val Ser Ile Val Cys Val Met Gly Ala Val 1 5 10 Gly Ala Val Trp Thr Ala Pro Leu Pro Leu Pro Trp Ala Pro Thr Pro 20 25 Ser Ile His Leu Arg Glu Glu Gly Ala Ala Phe Pro Phe Cys Gly Val 40 Cys Val Leu Arg Pro Arg Arg Ser Lys Trp Arg Ser Trp Asp Val Asn 50 55 Leu Gly Pro Arg Arg Gly Leu Leu Gly Cys Gly Pro Cys Pro Ser 65 70 75 Gly Lys Pro Arg Val His Leu Gln Arg Thr Arg Ser Gly Ala Gly Ala 90 Glu Ala Gly Gly Leu Pro Thr Arg Gly Ser Met Arg Gly Cys Pro Phe 100 105 110 Leu Gly Ser Ser Ala Ala Lys Cys Ser Leu Leu Leu Arg Pro Pro Ser 115 120 125 Arg Gly Glu Ala Ser Pro Trp Leu Pro Glu Phe Met Thr His Pro Val 140 135 His His Gln Gln Leu Ala Cys Gly Ser Gly Trp Leu Gly Thr Lys His 150 155 Pro Gly Gly Thr Cys Ala Leu Gly Ser Thr Met * 165 170 171

<210> 1917 <211> 72 <212> PRT <213> Homo sapiens

<400> 1917 Met Leu Arg Trp Gly Phe Leu Glu Ile Leu Phe Leu Arg Ser Trp Phe 5 10 His Ser Trp Ile Cys Leu Leu Pro Thr Pro Gln Leu Pro Pro Asn Gly 25 20 Ala Ser Ala Gly Ser Gln Asp Glu Gly Ser Arg Arg Leu Ser Leu 45 40 Glu Val Arg Gly Leu Met Asn His Val Pro Asn Leu Cys Val Ala Phe 55 Leu Ser Ile Val Ser Ile Ser * 65 70 71

<210> 1918 <211> 88 <212> PRT <213> Homo sapiens

<400> 1918 Met Thr Ser Leu Met Phe Leu Trp Arg Ala Leu Leu Glu Thr Ile Ser 5 10 Thr Asn Met Thr Phe Ser Leu Pro Leu Ala Ala Val Val Arg Ala Trp 20 25 Met Lys Pro Thr Gly Ser Gly Met Phe Leu Tyr Gln Tyr Leu Pro Val 40 Val Lys Ser Ser Gln Ala Val Phe Pro Val Val Ile Glu Ile Ser Ser 55 60 Ile Ser Gly Ser Ile Leu Pro Lys Phe Pro Met Leu Ser Leu Met Ser 70 75 Leu His Thr Gly Ser Ile Ile * 85 87

<210> 1919 <211> 54 <212> PRT <213> Homo sapiens

<210> 1920 <211> 114 <212> PRT <213> Homo sapiens

<400> 1920 Met His Pro Pro Leu Thr Pro Pro Thr Pro Leu Cys Leu Trp Leu Arg 1 5 10 Leu Leu Lys Ala Gln Ile Leu Ser Tyr Pro Val Pro Arg Phe Glu Thr 25 His Ser Leu Ile Ser Arg Cys Ser Gln Val Pro Pro Thr Phe Leu Trp Asp Ile Lys Lys Gly Val Arg Gly Gln Arg Glu Pro Ser Gly Pro Leu 55 Leu Pro Tyr Thr Leu His Cys Pro Phe Ser Pro His Gln Asn Ala Gln 75 80 70 Arg Arg Cys Asp Asp Ala Thr Glu Asp Tyr Ala Thr Trp Ser Asn Arg 85 - 90 Ser Gly Gln His Asp Gln Leu Ser Arg Gly Cys Leu Leu Pro Phe Leu 105 113

<210> 1921 <211> 139 <212> PRT <213> Homo sapiens

<400> 1921 Met Val Tyr Leu Tyr Ile Tyr Leu Asp Leu Phe Gln Phe Leu Ile Thr 1 5 10 Val Leu Gln Gly Phe Leu Phe Val Phe Glu Met Glu Phe His Ser Cys 20 25 30 Arg Pro Gly Gln Ser Ala Met Met Gln Ser Gln Leu Ala Ala Thr Ser 35 40 Ala Ser Arg Val Gln Val Ile Leu Val Val Ser Ala Pro Gln Glu Ala 55 60 Gly Thr Thr Gly Ala Arg His His Val Gln Leu Ile Phe Val Phe Leu 75 Leu Glu Met Gly Phe Cys His Val Gly Gln Ala Gly Leu Glu Leu Leu 85 Asn Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly Ile Arg 100 105 110 Gly Val Asn His Cys Ala Pro Pro Ile Asn Ser Leu Leu Thr Phe Gln 115 120 Ser Phe Ile His Leu Glu Cys Ile Val Ile * 135

<210> 1922 <211> 52 <212> PRT <213> Homo sapiens

<210> 1923 <211> 71 <212> PRT <213> Homo sapiens

```
35 40 45

Tyr Leu Leu Phe Phe Leu Trp Thr Phe Lys Leu Phe Ser Gly Phe Thr 50 55 60

Leu Lys Ile Ile Gln Gln * 65 70

<210> 1924 <211> 187
```

35 40 45
Phe Gln Ser Arg Gly Leu Cys Ala Pro Cys Ala Ser Ile Ala Asp Ser
50 55 60

Gly Ile Ala Asp Ser Gly Gly Asn Asn Leu Asn Phe Val Gly Ala Gly
65 70 75 80
Gly Val Ala Ser Gly His Leu Leu Ser Pro Leu Leu Gly Pro Gln Ser

Gly Val Ala Ser Gly His Leu Leu Ser Pro Leu Leu Gly Pro Gln Ser 85 90 95

Ser Pro Cys Pro His Cys Pro Arg Gly Gly Arg Leu Pro Ser Gln Pro 100 105 110

Leu Pro Leu Cys Ser Ala Arg Ser Trp Ala Gln Glu Ala Leu Arg Leu 115 120 125

Pro Ser Ser Ala Gln Leu Cys Pro Cys His Pro Leu Pro Arg Gly Leu 130 135 140

Gly Pro Val Ser Pro Ser Gly Leu Leu Ala Asn Ile Ser Tyr Arg His 145 150 155 160

Asn Trp Leu Leu Gly Ser Trp Pro Gly Trp Leu Ile Trp Gly Gly Lys
165 170 175

Asn Arg Gly Gly Leu Asn Ser Phe Leu Ala * 180 185 186

<210> 1925 <211> 50 <212> PRT <213> Homo sapiens

<212> PRT

<213> Homo sapiens

<210> 1926 <211> 47 <212> PRT <213> Homo sapiens

<210> 1927 <211> 149 <212> PRT <213> Homo sapiens

<400> 1927 Met Ala Thr Gly Leu Leu Ala Phe Leu Gly Leu Ala Ala Gly Gly Gln Thr Leu Cys Pro Ala Gly Glu Leu Pro Gly His Ala Arg Ala Gln Ala 25 Ser Gly Ala Pro Gly Ser Val Leu Ile Ala Val Pro Gly Arg Arg Val His Thr Cys Gly Pro Gly Pro Ala Ala Pro Ser Thr Arg Gly Glu 55 Cys Pro Pro Pro Ala Leu Gly His Thr Arg Pro Ala Arg Pro Arg Pro 70 Val Leu Leu Arg Pro Ser Cys Ser Pro Gly Ala Arg Gly Ala Gly Thr 85 90 Trp Cys Cys Ala Pro Ala Thr Gly His Ser Ala Pro Arg Gly Cys Pro 100 105 110 Pro Ala Arg Ala Ala Pro Thr Gly Ser Ala Thr Pro Ala Pro Pro Pro 115 120 125 Ala Ala Cys Ala Ala Phe His Ser Ala Trp Ser Val Pro Pro Ala Gly 135 Arg Gln Gln Gly * 148

<210> 1928 <211> 446 <212> PRT <213> Homo sapiens

```
40
Ile Ala Glu Cys Cys Ser Thr Pro Tyr Ser Leu Leu Gly Leu Val Phe
          55
Thr Val Ser Phe Val Ala Leu Gly Val Leu Thr Leu Cys Lys Phe Tyr
               70
                                75
Leu Gln Gly Tyr Arg Ala Phe Met Asn Asp Pro Ala Met Asn Arg Gly
                            90
Met Thr Glu Gly Val Thr Leu Leu Ile Leu Ala Val Gln Thr Gly Leu
                        105
Ile Glu Leu Gln Val Val His Arg Ala Phe Leu Leu Ser Ile Ile Leu
                     120
                                     125
Phe Ile Val Val Ala Ser Ile Leu Gln Ser Met Leu Glu Ile Ala Asp
                 135
Pro Ile Val Leu Ala Leu Gly Ala Ser Arg Asp Lys Ser Leu Trp Lys
145 150 155
His Phe Arg Ala Val Ser Leu Cys Leu Phe Leu Leu Val Phe Pro Ala
                170 175
           165
Tyr Met Ala Tyr Met Ile Cys Gln Phe Phe His Met Asp Phe Trp Leu
        180 185
Leu Ile Ile Ser Ser Ser Ile Leu Thr Ser Leu Gln Val Leu Gly
  195
          200
                                     205
Thr Leu Phe Ile Tyr Val Leu Phe Met Val Glu Glu Phe Arg Lys Glu
                  215
                                  220
Pro Val Glu Asn Met Asp Asp Val Ile Tyr Tyr Val Asn Gly Thr Tyr
225 230
                               235
Arg Leu Leu Glu Phe Leu Val Ala Leu Cys Val Val Ala Tyr Gly Val
      245 250
Ser Glu Thr Ile Phe Gly Glu Trp Thr Val Met Gly Ser Met Ile Ile
        260 265 270
Phe Ile His Ser Tyr Tyr Asn Val Trp Leu Arg Ala Gln Leu Gly Trp
   275 280
Lys Ser Phe Leu Leu Arg Arg Asp Ala Val Asn Lys Ile Lys Ser Leu
                 295
Pro Ile Ala Thr Lys Glu Gln Leu Glu Lys His Asn Asp Ile Cys Ala
    310
                              315
Ile Cys Tyr Gln Asp Met Lys Ser Ala Val Ile Thr Pro Cys Ser His
     325 330 335
Phe Phe His Ala Gly Cys Leu Lys Lys Trp Leu Tyr Val Gln Glu Thr
               345
Cys Pro Leu Cys His Cys His Leu Lys Asn Ser Ser Gln Leu Pro Gly
            360 . 365
Leu Gly Thr Glu Pro Val Leu Gln Pro His Ala Gly Ala Glu Gln Asn
                  375
Val Met Phe Gln Glu Gly Thr Glu Pro Pro Gly Gln Glu His Thr Pro
               390 395 400
Gly Thr Arg Ile Gln Glu Gly Ser Arg Asp Asn Asn Glu Tyr Ile Ala
                            410
Arg Arg Pro Asp Asn Gln Glu Gly Ala Phe Asp Pro Lys Glu Tyr Pro
        420
                         425 430
His Ser Ala Lys Asp Glu Ala His Pro Val Glu Ser Ala *
                     440 . 445
```

<210> 1929

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1929 Met Val Leu Pro Leu Pro Trp Leu Ser Arg Tyr His Phe Leu Arg Leu 10 Leu Leu Pro Ser Trp Ser Leu Ala Pro Gln Gly Ser His Gly Cys Cys 20 25 Ser Gln Asn Pro Lys Ala Ser Met Glu Glu Gln Thr Asn Ser Arg Gly 40 Asn Gly Lys Met Thr Ser Pro Pro Arg Gly Pro Gly Thr His Arg Thr 55 Ala Glu Leu Ala Arg Ala Glu Glu Leu Leu Glu Gln Gln Leu Glu Leu 70 Tyr Gln Ala Leu Leu Glu Gly Gln Glu Gly Ala Trp Glu Ala Gln Ala 85 90 Leu Val Leu Lys Ile His Lys Leu Lys Glu Gln Met Arg Arg His Gln 100 105 Glu Ser Leu Gly Gly Gly Ala * 119

<210> 1930 <211> 122 <212> PRT <213> Homo sapiens

<400> 1930

Met Thr Trp Leu Val Leu Leu Gly Thr Leu Leu Cys Met Leu Arg Val 10 Gly Leu Gly Thr Pro Asp Ser Glu Gly Phe Pro Pro Arg Ala Leu His 20 25 Asn Cys Pro Tyr Lys Cys Ile Cys Ala Ala Asp Leu Leu Ser Cys Thr 40 Gly Leu Gly Leu Gln Asp Val Pro Ala Glu Leu Pro Ala Gly Thr Ala 55 Asp Leu Asp Leu Ser His Asn Ala Leu Gln Arg Met Arg Pro Gly Trp 70 Leu Ala Pro Leu Phe Gln Leu Arg Ala Leu His Leu Asp His Asn Glu 90 Leu His Ala Leu Asp Arg Gly Val Phe Val Asn Ala Ser Gly Leu Arg 105 Leu Leu Asp Leu Ser Ser Asn Ala Glu Phe 115 120 122

<210> 1931 <211> 73 <212> PRT <213> Homo sapiens

35 40 · 45

Arg Pro Thr Cys Glu Thr Leu Gly Ser Arg Lys Ala Gln Asp Leu Gly
50 55 60

Ala Gly Tyr Tyr Val Ser Val His *
65 70 72

<210> 1932 <211> 68 <212> PRT <213> Homo sapiens

<210> 1933 <211> 47 <212> PRT <213> Homo sapiens

<210> 1934 <211> 86 <212> PRT <213> Homo sapiens

Ala Val His Arg Lys Ala Gly Asp Thr Glu Val Gln Gln Ser Leu Leu 65 70 75 80

Leu Leu Leu Lys Lys * 85

<210> 1935

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1935

<210> 1936

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1936

 Met Leu Leu Gln Thr Phe Val Thr Thr Cys Ile Ser Tyr Phe Tyr Trp

 1
 5
 10
 15

 His Phe Asn Phe Val Trp Ile Gln Phe Asn Val Cys Arg Val Leu Ser
 20
 25
 30

 Phe Gln Pro Glu Arg Leu Thr Leu Ala Phe Leu Ile Gly Gln Val Tyr
 45
 48

<210> 1937

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1937

50 55 60 Glu Ile Lys Phe Tyr Ile Gln Leu Ala Lys Lys Lys 65 70 75 76

<210> 1938 <211> 191 <212> PRT <213> Homo sapiens

<400> 1938 Met Ala Asp Glu Lys Thr Phe Arg Ile Gly Phe Ile Val Leu Gly Leu 10 Phe Leu Leu Ala Leu Gly Thr Phe Leu Met Ser His Asp Arg Pro Gln 25 Val Tyr Gly Thr Phe Tyr Ala Met Gly Ser Val Met Val Ile Gly Gly 40 Ile Ile Trp Ser Met Cys Gln Cys Tyr Pro Lys Ile Thr Phe Val Pro 55 60 Ala Asp Ser Asp Phe Gln Gly Ile Leu Ser Pro Lys Ala Met Gly Leu 70 75 Leu Glu Asn Gly Leu Ala Ala Glu Met Lys Ser Pro Ser Pro Gln Pro 90 85 Pro Tyr Val Arg Leu Trp Glu Glu Ala Ala Tyr Asp Gln Ser Leu Pro 105 Asp Phe Ser His Ile Gln Met Lys Val Met Ser Tyr Ser Glu Asp His 120 125 Arg Ser Leu Leu Ala Pro Glu Met Gly Gln Pro Lys Leu Gly Thr Ser 135 140 Asp Gly Glu Gly Gly Pro Gly Asp Val Gln Ala Trp Met Glu Ala 150 155 Ala Val Val Ile His Lys Gly Leu Asn Glu Ser Glu Gly Glu Arg Arg 165 170 Leu Thr Gln Ser Trp Pro Gly Pro Leu Ala Cys Pro Gln Gly Pro

185

<210> 1939 <211> 82 <212> PRT <213> Homo sapiens

180

<400> 1939 Met Val Arg Ser Ile Arg Leu Leu Phe Phe Phe Gly Trp Gly Phe Ser 10 1 5 Thr Thr Gln Gln Pro Ser Leu Cys Gln Asn Ser Leu Met Phe Pro Asp 20 25 Gly Ser Ser Phe Thr Pro Leu Ser Glu Ala Pro Lys Gly Ser Phe Pro 40 45 Gly Val Trp Thr Thr His Ser Ser Leu Ser Pro Asp Thr Pro Pro Pro 55 60 Trp Val His Ser Ala Gly Trp Val Gln Thr Lys Trp Asn Pro Trp Asn 70 75 Leu * 81

<210> 1940 <211> 101 <212> PRT <213> Homo sapiens

<400> 1940 Met His Val Cys Leu His Ile Trp Gly Leu Gly Val Cys Val Phe Met 5 10 His Met Met Cys Ala Cys Val Gly Val Tyr Val Cys Pro Phe Met Arg 25 Tyr Gly Met Gln Ile Cys Ala Cys Ile His Ala His Ser Cys Ser Ala 40 Cys Val Cys Ser Cys Ile Trp Cys Met His Gly Cys Ser Tyr Leu Trp 55 Gly Thr Gly Ile Met His Val Cys Ser Ser Val Trp. Gly Val Gly Ile 70 75 Pro Gly Leu Trp Pro Glu Ala Pro Leu Gln Asp Thr Ala Pro Cys Arg 85 90 Leu Pro Arg Gly * 100

<210> 1941 <211> 88 <212> PRT <213> Homo sapiens

<400> 1941 Met Lys Ala Ser Val Leu Ser Pro Ser Phe Leu Leu Val Leu Trp Ser 5 10 Cys Phe Leu Ser Cys Ser Cys Met Glu Pro Gln Ser Gly Phe Pro Arg 20 25 Pro Ser Cys Phe Thr Val Gly Phe Leu Leu Arg Arg Thr Lys Thr 35 40 Arg Arg Gln Lys Ala Thr Asn Thr Val Lys Met Arg Thr Thr Lys Ile 55 60 Leu Lys Ile Lys Ile Asp Lys Arg Arg Trp Pro Thr Arg Met Ser Ser 70 . 75 Lys Trp Asn Pro Lys Glu Trp 85 87

<210> 1942 <211> 46 <212> PRT <213> Homo sapiens

 $<\!\!400\!\!> 1942$ Met Arg Ser Met Gly Phe Arg Ala Gln Gly Leu Pro Phe Gly Ile Arg 1 5 10 15 Gln Thr Trp Leu Arg Ile Leu Asp Leu Leu Leu Thr Cys Thr Leu Pro

20 25 30
Phe Gly Ser Arg Asp Val Lys Trp Arg Cys Cys His Leu *
35 40 45

<210> 1943

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1943

Met Phe Thr Leu Leu Val Leu Leu Ser Gln Leu Pro Thr Val Thr Leu 5 10 Gly Phe Pro His Cys Ala Arg Gly Pro Lys Ala Ser Lys His Ala Gly 20 25 Glu Glu Val Phe Thr Ser Lys Glu Glu Ala Asn Phe Phe Ile His Arg 40 Arg Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn 55 60 Leu Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg 70 75 Glu Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr 90 Ser Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile 100 105 Asp Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu 120 125 Val Ile Phe Gly Leu Leu Gly Tyr Tyr Leu Cys Ile Thr Lys Cys Asn 130 135 Arg Leu Gln His Pro Cys Ser Ser Ala Val Tyr 150

<210> 1944 .

<211> 61

<212> PRT

<213> Homo sapiens

<400> 1944

 Met Cys Gln His Val Gln Leu Ile Phe Val Phe Phe Val Glu Thr Gly

 1
 5
 10
 15

 Phe His His Val Ala Gln Ala Gly Leu Lys Leu Leu Gly Ser Ser Asp
 20
 25
 30

 Leu Pro Thr Ser Ala Ser Gln Ser Ala Gly Ile Lys Gly Ile Ser His
 35
 40
 45

 His Val Gln Leu Lys Phe Leu Ile Ile Asn Asn Phe
 *
 *

 50
 55
 60

<210> 1945

<211> 79

<212> PRT

<213> Homo sapiens

<210> 1946 <211> 72

<212> PRT

<213> Homo sapiens

<400> 1946

<210> 1947 <211> 56 <212> PRT

<213> Homo sapiens

<400> 1947

<210> 1948 <211> 48 <212> PRT

<213> Homo sapiens

<400> 1948

<210> 1949 <211> 136 <212> PRT <213> Homo sapiens

<400> 1949

Met Leu Leu Ala Thr Leu Leu Leu Leu Leu Gly Gly Ala Leu Ala 1 5 10. His Pro Asp Arg Ile Ile Phe Pro Asn His Ala Cys Glu Asp Pro Pro 20 25 Ala Val Leu Leu Glu Val Gln Gly Thr Leu Gln Arg Pro Leu Val Arg 40 Asp Ser Arg Thr Ser Pro Ala Asn Cys Thr Trp Leu Ile Leu Gly Ser 55 Lys Glu Gln Thr Val Thr Ile Arg Phe Gln Lys Leu His Leu Ala Cys 70 Gly Ser Glu Arg Leu Thr Leu Arg Ser Pro Leu Gln Pro Leu Ile Ser 85 90 Leu Cys Glu Ala Pro Pro Ser Pro Leu Gln Leu Pro Gly Gly Asn Val 100 105 Thr Ile Thr Tyr Ser Tyr Ala Gly Ala Lys Arg Pro Gln Gly His Gly 120 Phe Phe Cys Phe Leu Lys Ala Lys

<210> 1950 <211> 78 <212> PRT <213> Homo sapiens

<400> 1950 Trp Ile Tyr

 Met
 Trp
 Ile
 Tyr
 Phe
 Trp
 Thr
 Leu
 Asn
 Ser
 Val
 Pro
 Val
 Ile
 Tyr
 Met
 15

 Ser
 Thr
 Leu
 Met
 Ser
 Ile
 Pro
 His
 Tyr
 Phe
 Asp
 Tyr
 Cys
 Phe
 Ile
 Ile
 30
 Val
 Ser
 Thr
 Phe
 Ile
 Ile

<210> 1951

<211> 89 <212> PRT <213> Homo sapiens

<210> 1952 <211> 47 <212> PRT <213> Homo sapiens

<210> 1953 <211> 56 <212> PRT <213> Homo sapiens

<210> 1954 <211> 425 <212> PRT <213> Homo sapiens

<400> 1954 Met Thr Leu Arg Pro Gly Thr Met Arg Leu Ala Cys Met Phe Ser Ser 10 Ile Leu Leu Phe Gly Ala Ala Gly Leu Leu Phe Ile Ser Leu Gln 25 Asp Pro Thr Glu Leu Ala Pro Gln Gln Val Pro Gly Ile Lys Phe Asn 40 Ile Arg Pro Arg Gln Pro His His Asp Leu Pro Pro Gly Gly Ser Gln 55 Asp Gly Asp Leu Lys Glu Pro Thr Glu Arg Val Thr Arg Asp Leu Ser Ser Gly Ala Pro Arg Gly Arg Asn Leu Pro Ala Pro Asp Gln Pro Gln 85 Pro Pro Leu Gln Arg Gly Thr Arg Leu Arg Leu Arg Gln Arg Arg 100 105 Arg Leu Leu Ile Lys Lys Met Pro Ala Ala Ala Thr Ile Pro Ala Asn 120 Ser Ser Asp Ala Pro Phe Ile Arg Pro Gly Pro Gly Thr Leu Asp Gly 135 140 Arg Trp Val Ser Leu His Arg Ser Gln Gln Glu Arg Lys Arg Val Met 150 155 Gln Glu Ala Cys Ala Lys Tyr Arg Ala Ser Ser Ser Arg Arg Ala Val 165 170 Thr Pro Arg His Val Ser Arg Ile Phe Val Glu Asp Arg His Arg Val 180 185 . Leu Tyr Cys Glu Val Pro Lys Ala Gly Cys Ser Asn Trp Lys Arg Val 195 200 Leu Met Val Leu Ala Gly Leu Ala Ser Ser Thr Ala Asp Ile Gln His 215 220 Asn Thr Val His Tyr Gly Ser Ala Leu Lys Arg Leu Asp Thr Phe Asp 230 235 Arg Gln Gly Ile Leu His Arg Leu Ser Thr Tyr Thr Lys Met Leu Phe Val Arg Glu Pro Phe Glu Arg Leu Val Ser Ala Phe Arg Asp Lys Phe 260 265 Glu His Pro Asn Ser Tyr Tyr His Pro Val Phe Gly Lys Ala Ile Leu 280 275 285 Ala Arg Tyr Arg Ala Asn Ala Ser Arg Glu Ala Leu Arg Thr Gly Ser 295 Gly Val Arg Phe Pro Glu Phe Val Gln Tyr Leu Leu Asp Val His Arg 315 Pro Val Gly Met Asp Ile His Trp Asp His Val Ser Arg Leu Cys Ser 330 Pro Cys Leu Ile Asp Tyr Asp Phe Val Gly Lys Phe Glu Ser Met Glu 345 Asp Asp Ala Asn Phe Phe Leu Ser Leu Ile Arg Ala Pro Arg Asn Leu 360 Thr Phe Pro Arg Phe Lys Asp Arg His Ser Gln Glu Ala Arg Thr Thr . 380 375 Ala Arg Ile Ala His Gln Tyr Phe Ala Gln Leu Ser Ala Leu Gln Arg 390 395 Gln Arg Thr Tyr Asp Phe Tyr Tyr Met Asp Tyr Leu Met Phe Asn Tyr 405 Ser Lys Pro Phe Ala Asp Leu Tyr * 420 424

```
<210> 1955
<211> 106
<212> PRT
<213> Homo sapiens
```

<210> 1956 <211> 139 <212> PRT <213> Homo sapiens

<400> 1956

Met Val Leu Pro Phe Ile Cys Asn Leu Leu Arg Arg His Pro Ala Cys 10 Arg Val Leu Val His Arg Pro His Gly Pro Glu Leu Asp Ala Asp Pro 25 Tyr Asp Pro Gly Glu Glu Asp Pro Ala Gln Ser Arg Ala Leu Glu Ser Ser Leu Trp Glu Leu Gln Ala Leu Gln Arg His Tyr His Pro Glu Val 55 60 Ser Lys Ala Ala Ser Val Ile Asn Gln Ala Leu Ser Met Pro Glu Val 70 75 80 Ser Ile Ala Pro Leu Leu Glu Leu Thr Ala Tyr Glu Ile Phe Glu Arg 85 90 Asp Leu Lys Lys Gly Pro Glu Pro Val Pro Thr Gly Val Leu Ser 105 110 Gln Pro Arg Ala Cys Trp Asp Gly Arg Val Lys Leu Cys Ala Gln His 120

135 138

<210> 1957 <211> 87 <212> PRT <213> Homo sapiens

130

Phe His Ala Gln Leu Thr Leu Ala His Leu *

<210> 1958 <211> 48 <212> PRT <213> Homo sapiens

<210> 1959 <211> 65 <212> PRT <213> Homo sapiens

<210> 1960 <211> 78 <212> PRT <213> Homo sapiens

<400> 1960

 Met
 Ser
 Tyr
 Val
 Arg
 His
 Val
 Leu
 Ser
 Cys
 Leu
 Gly
 Gly
 Leu
 Ala

 Leu
 Trp
 Arg
 Ala
 Gly
 Gln
 Trp
 Leu
 Trp
 Ala
 Gly
 Arg
 Leu
 Gly
 His
 Cys

 Leu
 Trp
 Arg
 Ala
 Val
 Ser
 Glu
 Glu
 Leu
 Leu
 Pro
 Asn
 Ser
 Gly
 His

 35
 40
 Val
 Pro
 Lys
 Asp
 Lys
 Glu
 Gly
 Gly
 Phe
 Asp

 Gly
 Pro
 Asp
 Gly
 Fro
 His
 Asp
 Lys
 Glu
 Gly
 Fro
 Asp
 Asp

 Leu
 Gly
 Pro
 Pro
 Pro
 Trp
 Fro
 Fro

<210> 1961

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1961

<210> 1962

<211> 65

<212> PRT

<213> Homo sapiens

<400> 1962

 Met
 Phe
 Ser
 Ala
 Val
 Phe
 Pro
 Ala
 Val
 Ser
 Cys
 Gln
 Ile
 Ser
 Leu
 Leu

 Ser
 Thr
 Cys
 Asn
 Ser
 Leu
 Gln
 His
 Phe
 Pro
 Tyr
 Ala
 Gly
 Val
 Leu
 Cys

 Phe
 Arg
 Pro
 Val
 Leu
 Cys
 Leu
 Cys
 Pro
 Gly
 Gln
 Asp
 Phe
 Cys
 Gly
 Asn

 Val
 Arg
 Cys
 Gln
 Trp
 Arg
 Leu
 Leu
 Ala
 Gly
 Val
 Asp
 Val
 Ser
 Asp
 Val

 Val
 Arg
 Cys
 Gln
 Leu
 Ala
 Gly
 Val
 Asp
 Val
 Ser
 Asp
 Val

 So
 55
 55
 60
 60
 64

<210> 1963

<211> 53

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(53) <223> Xaa = any amino acid or nothing

<210> 1964 <211> 232 <212> PRT <213> Homo sapiens

<400> 1964 Met Pro Ser Val His Arg Leu Leu Gly Pro Gln Pro Val Pro Ser Arg 5 10 Arg Leu Arg Leu Ala Leu Ala Leu Leu Ser Leu Gln Val Val Val 20 25 Phe Phe Leu Val Val Leu Gly Gln Gly Arg Leu Leu Gln Pro Cys Arg 40 Gly Cys Leu Glu Leu Pro Gly Gly Pro Gly Glu Ala Glu Asp His Gly 55 Asp Leu Gly Gln Gly Trp Val Gly Leu Leu Gln Ala Leu Asp Pro Leu 70 75 Ser His Arg Arg Leu Val Met Ser Thr Arg His Ala His Gly Glu Asp 85 90 Arg Ala Phe Leu His Phe Ile Asp Val Lys Leu Val Val Val Pro Ala 100 105 110 Thr Pro His Ile Leu Gln Val Gln Leu His Arg Val Val Glu Val Pro 120 Leu Leu Arg Arg Leu Phe His Phe Pro Leu Leu Arg Gly Gln Gln Val 135 140 Ser Ser Glu Asp Val Val Ile His Thr Leu Val Ala Glu Pro Gln Gly 150 155 Glu Gly Ala Leu Asn Lys Asp Arg Pro Gly Trp Ile Val Ala Gly Gln 165 170 Gly Gly Leu Leu Ile Gly Thr Leu Asp Ser Trp Cys Gly Asp Ile His 185 Ala Leu Cys Pro Thr Met Trp Gly Trp Gly Gly Ser Ala Ala Pro Val 200 Glu Ser Leu Gly Lys Gly Thr Ser Gly Glu Gly Asp Gly Arg Arg Gln 215 Gly Gln Arg Thr Gly Pro Gly * 230 231

<210> 1965 <211> 253 <212> PRT

<213> Homo sapiens

<400> 1965 Met Gly Cys Ala Ile Ile Ala Gly Phe Leu His Tyr Leu Phe Leu Ala 10 Cys. Phe Phe Trp Met Leu Val Glu Ala Val Ile Leu Phe Leu Met Val 20 25 Arg Asn Leu Lys Val Val Asn Tyr Phe Ser Ser Arg Asn Ile Lys Met 40 Leu His Ile Cys Ala Phe Gly Tyr Gly Leu Pro Met Leu Val Val Val 55 Ile Ser Ala Ser Val Gln Pro Gln Gly Tyr Gly Met His Asn Arg Cys 75 Trp Leu Asn Thr Glu Thr Gly Phe Ile Trp Ser Phe Leu Gly Pro Val Cys Thr Val Ile Val Ile Asn Ser Leu Leu Leu Thr Trp Thr Leu Trp 100 105 Ile Leu Arg Gln Arg Leu Ser Ser Val Asn Ala Glu Val Ser Thr Leu 120 Lys Asp Thr Arg Leu Leu Thr Phe Lys Ala Phe Ala Gln Leu Phe Ile 135 140 Leu Gly Cys Ser Trp Val Leu Gly Ile Phe Gln Ile Gly Pro Val Ala 150 155 Gly Val Met Ala Tyr Leu Phe His His His Gln Gln Pro Ala Gly Gly 170 Leu His Leu Pro His Pro Leu Ser Ala Gln Arg Pro Gly Thr Arg Arg 185 Ile Gln Glu Val Asp His Trp Glu Asp Glu Ala Gln Leu Pro Val Pro 200 Asp Leu Lys Asp Leu Ala Val Leu His Ala Ile Arg Phe Gln Asp Gly 215 220 Leu Lys Ser Phe Leu Ala Phe Lys Tyr Ala Met Glu Pro Thr Val Gly 230 235 Gly Thr Ser Ser Phe Pro Cys Arg Glu Pro Tyr Pro 245 250

<210> 1966 <211> 649 <212> PRT

<213> Homo sapiens

<400> 1966 Met Val Thr Cys Phe Ile Ile Gly Leu Leu Phe Pro Val Phe Ser Val Cys Tyr Leu Ile Ala Pro Lys Ser Pro Leu Gly Leu Phe Ile Arg Lys

40 45 Phe Leu Leu Leu Ala Ser Gln His Ile Asp Arg Ser Asp Leu Asn 55 60 Arg Gln Gly Pro Pro Pro Thr Ile Val Glu Trp Met Ile Leu Pro Trp Val Leu Gly Phe Ile Trp Gly Glu Ile Lys Gln Met Trp Asp Gly Gly 90

25 Pro Phe Ile Lys Phe Ile Cys His Thr Ala Ser Tyr Leu Thr Phe Leu

Leu Gln Asp Tyr Ile His Asp Trp Trp Asn Leu Met Asp Phe Val Met

| | | | 100 | | | | | 105 | | | | | 110 | | |
|-----|-----|-----|------------|------------|------------|-----|-----|-----|------------|------------|-----|-----|-----|------------|------------|
| | | 115 | Tyr | | | | 120 | | | | | 125 | | | |
| | 130 | | Ala | | | 135 | | | | | 140 | | | | |
| 145 | | | Ala | | 150 | | | | | 155 | | | | | 160 |
| | | | Ile | 165 | | | | | 170 | | | | | 175 | |
| | | | Leu 180 | | | | | 185 | | | | _ | 190 | | |
| | | 195 | Leu | | | | 200 | | | | | 205 | | | |
| | 210 | | Tyr | • | | 215 | | | | | 220 | | | | |
| 225 | | | Gln | | 230 | | | | | 235 | | | | | 240 |
| | | | Trp | 245 | | | | | 250 | | | | | 255 | |
| | | | Gln 260 | | | | | 265 | | | | | 270 | | |
| | | 275 | Asn | | | | 280 | | | | | 285 | | | |
| | 290 | | Asn | | | 295 | | | | | 300 | | | | |
| 305 | | | Phe | | 310 | | | | | 315 | | | | | 320 |
| | | | Leu | 325 | | | | | 330 | | | | | 335 | |
| | | | Leu 340 | | | | | 345 | | | | | 350 | _ | _ |
| | | 355 | Lys | | | | 360 | | | | _ | 365 | - | | |
| | 370 | | Arg | | | 375 | | | | | 380 | | | | |
| 385 | | | Tyr | | 390 | | | | | 395 | | | | | 400 |
| | | | Glu | 405 | | | | | 410 | | | | | 415 | |
| | | | Glu 420 | | | | | 425 | | | | | 430 | | |
| | | 435 | Ala | | | | 440 | | | | | 445 | | - | |
| | 450 | | Ser | | | 455 | | | | | 460 | | | | |
| 465 | ser | ьeu | Phe | Asp | Leu 470 | Thr | Thr | Leu | Ile | His 475 | Pro | Arg | Ser | Ala | Ala 480 |
| | | | Glu | 485 | | | | | 490 | | | | | 495 | |
| | | • | Pro 500 | | | | | 505 | | | | | 510 | | - |
| | | 515 | Phe | | | | 520 | | | | | 525 | | | |
| | 530 | | Ala | | | 535 | | | | | 540 | | | | |
| 545 | | | Ala | | 550 | | | | | 555 | | | | | 560 |
| Gly | Leu | Ala | Ser | Arg 565 | Gly | Asp | Leu | Ser | Ile 570 | Pro | Gly | Leu | Ser | Glu 575 | Gln |

<210> 1967 <211> 80 <212> PRT <213> Homo sapiens

(213) Homo Baptens

<210> 1968 <211> 49 <212> PRT <213> Homo sapiens

<210> 1969 <211> 150 <212> PRT <213> Homo sapiens

<400> 1969
Met His Val His Phe Trp Leu Val Thr Ala Ser Phe Ser Ser Ser Val

5 Ala Trp Thr Thr Ala Glu Ile Thr Gly Gly Val Ser Gly Val Ala Ala 20 25 Gly Val Gly Ser Trp Glu Gly Gly Ser Glu Arg Gly Asp Arg Phe Gly 40 Asp Phe Phe Thr Leu Asn Val Ser Val Phe Arg Gly Val Phe Phe 50 55 60 Leu Ala Gly Leu Phe Ser Pro Ser Pro Ser Thr Pro Leu Ala Ser Ile 70 75 Ala Leu Ala Gly Ile Ser Lys Glu Ala Gly Asp Leu Glu Gly Glu Leu 85 90 Gly Val Leu Glu Asp Val Leu Lys Gly Ser Thr Asp Ser Ser Gln Val 105 Ser Gly Ser Lys Leu Tyr Asp Cys Trp Gly Ser Leu Gly Asp Ser Cys 125 120 Ile Phe Glu Val Glu Glu Lys Gly Leu Lys Leu Gly Ser Ser His Leu 135 Ser Ile Ser Lys Val * 149

<210> 1970 <211> 48 <212> PRT <213> Homo sapiens

<210> 1971 <211> 64

35 . 40

<213> Homo sapiens

<212> PRT

<210> 1972 <211> 211 <212> PRT

<213> Homo sapiens <221> misc feature <222> (1) ... (211) <223> Xaa = any amino acid or nothing <400> 1972 Met Thr Arg Met Leu Asn Met Leu Ile Val Phe Arg Phe Leu Arg Ile 1 5 10 Ile Pro Ser Met Lys Pro Met Ala Val Val Ala Ser Thr Val Leu Gly 25 Leu Val Gln Asn Met Arg Ala Phe Gly Gly Ile Leu Val Val Val Tyr 40 Tyr Val Phe Ala Ile Ile Gly Ile Asn Leu Phe Arg Gly Val Ile Val 50 55 Ala Leu Pro Gly Asn Ser Ser Leu Ala Pro Ala Asn Gly Ser Ala Pro 65 70 75 Cys Gly Ser Phe Glu Gln Leu Glu Tyr Trp Ala Asn Asn Phe Asp Asp 90 Phe Xaa Ala Ala Leu Val Thr Leu Trp Asn Leu Met Val Val Asn Asn 100 105 110 Trp Gln Val Phe Leu Asp Ala Tyr Arg Arg Tyr Ser Gly Pro Trp Ser 115 120 125 Lys Ile Tyr Phe Val Leu Trp Trp Leu Val Ser Ser Val Ile Trp Val 135 Asn Leu Phe Leu Ala Leu Ile Leu Glu Asn Phe Leu His Lys Trp Asp 145 150 155 Pro Arg Ser His Leu Gln Pro Leu Ala Gly Thr Pro Glu Ala Thr Tyr 165 170 Gln Met Thr Val Glu Leu Leu Phe Arg Asp Ile Leu Glu Glu Pro Gly 180 185 190 Glu Asp Glu Leu Thr Glu Arg Leu Ser Gln His Pro His Leu Trp Leu 195 200 Cys Arg * 210 <210> 1973 <211> 53 <212> PRT <213> Homo sapiens <400> 1973 Met Ile Gln Tyr Ala Val Phe Val Leu Cys Gly Phe Leu Tyr Leu Cys 5 10 Phe Met Leu Phe Phe Phe Ser Ser Val Thr Gln Ala Gly Val Ser Glu 25 20 Pro Arg Ser Ser His Cys Thr Pro Ala Trp Ala Thr Glu Arg Asp Cys 40 35 Val Ser Asn Lys * 50 52

<210> 1974 <211> 50

<212> PRT <213> Homo sapiens

<400> 1974

 Met Gly Val Thr Thr Ala Thr Leu Ile Ala Pro Ala Leu Arg Thr Leu

 1
 5
 10
 15

 Arg Thr Ser Ala Val Cys Ser Thr Thr Ala Glu Thr Ser Phe Ser Ala
 20
 25
 30

 Cys Thr Phe Val Ser Thr Ser Cys Ser Lys Lys Gly Thr Pro Arg Phe
 35
 40
 45

 Ser *
 49

<210> 1975 <211> 87 <212> PRT <213> Homo sapiens

<210> 1976 <211> 107 <212> PRT <213> Homo sapiens

<400> 1976

Met Ala Leu Tyr Glu Leu Phe Ser His Pro Val Glu Arg Ser Tyr Arg 5 10 15 Ala Gly Leu Cys Ser Lys Ala Ala Leu Phe Leu Leu Leu Ala Ala Ala 20 25 Leu Thr Tyr Ile Pro Pro Leu Leu Val Ala Phe Arg Ser His Gly Phe 35 40 Trp Leu Lys Arg Ser Ser Tyr Glu Glu Gln Pro Thr Val Arg Phe Gln 55 His Gln Val Leu Leu Val Ala Leu Leu Gly Pro Glu Ser Asp Gly Phe 70 75 Leu Ala Trp Ser Thr Phe Pro Ala Phe Asn Arg Gln Gln Gly Asp Arg Leu Arg Val Pro Leu Val Ser Trp Arg Arg * 100

<210> 1977 <211> 134 <212> PRT <213> Homo sapiens

<400> 1977 Met Val Thr Val Ala Met Ala Cys Ser Gly Ala Leu Thr Ala Leu Cys 10 Cys Leu Phe Val Ala Met Gly Val Leu Arg Val Pro Trp His Cys Pro 25 Leu Leu Val Thr Glu Gly Leu Leu Asp Met Leu Ile Ala Gly Gly 40 Tyr Ile Pro Ala Leu Tyr Phe Tyr Phe His Tyr Leu Ser Ala Ala Tyr 50 55 Gly Ser Pro Val Cys Lys Glu Arg Gln Ala Leu Tyr Gln Ser Lys Gly 75 70 Tyr Ser Gly Phe Gly Cys Ser Phe His Gly Ala Asp Ile Gly Ala Gly 85 90 Ile Phe Ala Ala Leu Gly Ile Val Val Phe Ala Leu Gly Ala Val Leu 100 105 Ala Ile Lys Gly Tyr Arg Lys Val Arg Lys Leu Lys Glu Lys Pro Ala 115 120 Glu Met Phe Glu Phe * 130 133

<210> 1978 <211> 61 <212> PRT <213> Homo sapiens

<210> 1979 <211> 66 <212> PRT <213> Homo sapiens

20 25 30

Arg His Lys Tyr Ser Tyr Asp Ala Asn Val Phe Leu Gln Val Asn Tyr
35 40 45

Ile Thr Trp Pro Asp Ser Phe Ser Pro Val Pro Ser Leu Pro Pro Ile
50 55 60

Leu *
65

<210> 1980

<211> 51

<212> PRT

<213> Homo sapiens

<400> 1980

<210> 1981

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1981

 Met
 Met
 Trp
 Ala
 Ala
 Gly
 Ala
 Val
 Ala
 Ala
 Ala
 Ala
 Met
 Ser
 Ser
 Ile
 Thr
 Phe

 1
 5
 40
 45
 45
 45
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 45
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46
 46

<210> 1982

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1982

Met His Asn Asn Tyr Thr Ala Leu Leu Gly Val Trp Ile Tyr Gly Phe

1 5 10 15

Phe Val Leu Met Leu Leu Val Leu Asp Leu Leu Tyr Tyr Ser Ala Met

20 25 30

Asn Tyr Asp Ile Cys Lys Val Tyr Leu Ala Arg Trp Gly Ile Gln Gly 40 Arg Trp Met Lys Gln Asp Pro Arg Arg Trp Gly Asn Pro Ala Arg Ala 55 Pro Arg Pro Gly Gln Arg Ala Pro Gln Pro Gln Pro Pro Pro Gly Pro 70 Leu Pro Gln Ala Pro Gln Ala Val His Thr Leu Arg Gly Asp Ala His 90 Ser Pro Pro Leu Met Thr Phe Gln Ser Ser Ser Ala Trp Glu Gly Ala 105 Ser Gln Gln Glu Ile Pro Glu Asn Glu Glu Thr Glu Lys Gly Asp 120 Asp Gln Ile Ser Ser Phe Leu Gly Val Thr Ser Asn Thr Lys Glu Ala 135 Ser Val Ile Gly Ile Gln Lys Thr Val Asp Val Leu

<210> 1983 <211> 63 <212> PRT <213> Homo sapiens

<400> 1983 Met Arg Leu Ile Arg Ile Trp Phe Ser Gly Lys Phe Phe Pro Ala Gly Leu His Ser Gln Ser Leu Pro Ser Ile Ser Ala Ala Ile Gly Leu Leu 20 25 Met Leu Phe Thr Asn Leu Phe Thr Cys Ser Lys Cys Phe Val Ile Ser 40 Val Ala Lys Thr Met Ser Ile Ile Ala Trp Arg Ser Val Arg *

<210> 1984 <211> 232 <212> PRT <213> Homo sapiens

<400> 1984

Met Phe His Arg Cys Gly Ile Met Ala Leu Val Ala Ala Tyr Leu Asn 5 Phe Val Ser Gln Met Ile Ala Val Pro Ala Phe Cys Gln His Val Ser 20 25 Lys Val Ile Glu Ile Arg Thr Met Glu Ala Pro Tyr Phe Leu Pro Glu 35 40 His Ile Phe Arg Asp Lys Cys Met Leu Pro Lys Ser Leu Glu Lys His 55 Glu Lys Asp Leu Tyr Phe Leu Thr Asn Lys Ile Ala Glu Ser Leu Gly 70 75 Gly Lys Trp Asp Ile Val Leu Arg Asp Cys Gln Phe Arg Met Leu Pro 90 Gln Val Thr Asp Glu Asp Arg Leu Ser Arg Arg Lys Ser Ile Val Asp 105 Thr Val Ser Ile Gln Val Asp Ile Leu Ser Asn Asn Val Pro Ser Asp

115 120 Asp Val Val Ser Asn Thr Glu Glu Ile Thr Phe Glu Ala Leu Lys Lys 130 135 140 Ala Ile Asp Thr Ser Gly Met Glu Glu Glu Lys Glu Lys Arg Arg 150 155 Leu Val Ile Glu Lys Phe Gln Lys Ala Pro Phe Glu Glu Ile Ala Ala 165 170 175 Gln Cys Glu Ser Lys Ala Asn Leu Leu His Asp Arg Leu Ala Gln Ile 180 185 Leu Glu Leu Thr Ile Arg Pro Pro Pro Ser Pro Ser Gly Thr Leu Thr 205 200 Ile Thr Ser Gly His Ala Gln Tyr Gln Ser Val Pro Val Tyr Glu Met 210 215 Lys Phe Pro Asp Leu Cys Val Tyr 230 232

<210> 1985 <211> 141 <212> PRT

<213> Homo sapiens

<400> 1985 Met Asn Leu Ser Leu Pro Phe Leu Cys Leu Phe Leu Ser Phe Ser 10 Phe Lys Leu Ala Leu Gln Leu Arg Lys Val Ser Leu Leu Ser Leu Arg 25 Leu Trp Gly Gln Ser Ile Cys Cys Leu Glu Lys Glu Gly Asn Gln Asp 40 Ser Ser Gly Thr Gln Met Ser Ser Ser Leu Ala Leu Leu Asn Pro Leu 55 60 Leu His Asn Trp Ser Phe Ile Leu Ala Leu Asn Asp Pro Ala Gly His 75 70 His Gly Phe Leu Phe Leu Leu Val Phe Phe Phe Ser Glu Thr Glu Ser 90 His Ser Val Thr Gln Ala Gly Val Gln Trp Arg Asp Leu Ser Ser Leu 105

Gln Pro Leu Pro Pro Gly Phe Lys Arg Phe Phe Cys Leu Ser Leu Pro

115 120 125 Ser Ser Trp Asp Tyr Arg Cys Ala Thr Thr Pro Gly * 130 135 140

<210> 1986 <211> 292 <212> PRT <213> Homo sapiens

Asn Glu Thr Leu Lys His Leu Thr Asn Asp Thr Thr Thr Pro Glu Ser 60 Thr Met Thr Ser Gly Gln Ala Arg Ala Ser Thr Gln Ser Pro Gln Ala 70 Leu Glu Asp Ser Gly Pro Val Asn Ile Ser Val Ser Ile Thr Leu Thr 85 90 Leu Asp Pro Leu Lys Pro Phe Gly Gly Tyr Ser Arg Asn Val Thr His 100 105 Leu Tyr Ser Thr Ile Leu Gly His Gln Ile Gly Leu Ser Gly Arg Glu 120 Ala His Glu Glu Ile Asn Ile Thr Phe Thr Leu Pro Thr Ala Trp Ser 140 135 Ser Asp Asp Cys Ala Leu His Gly His Cys Glu Gln Val Val Phe Thr 150 155 Ala Cys Met Thr Leu Thr Ala Ser Pro Gly Val Phe Pro Val Thr Val . 170 Gln Pro Pro His Cys Val Pro Asp Thr Tyr Ser Asn Ala Thr Leu Trp 185 Tyr Lys Ile Phe Thr Thr Ala Arg Asp Ala Asn Thr Lys Tyr Ala Gln 200 Asp Tyr Asn Pro Phe Trp Cys Tyr Lys Gly Ala Ile Gly Lys Val Tyr 215 His Ala Leu Asn Pro Lys Leu Thr Val Ile Val Pro Asp Asp Asp Arg 230 235 Ser Leu Ile Asn Leu His Leu Met His Thr Ser Tyr Phe Leu Phe Val 245 250 Met Val Ile Thr Met Phe Cys Tyr Ala Val Ile Lys Gly Arg Pro Ser 265 270 Lys Leu Arg Gln Ser Asn Pro Glu Phe Cys Pro Glu Lys Val Ala Leu 275 280 Ala Glu Ala * 290 291

<210> 1987 <211> 186 <212> PRT <213> Homo sapiens

<400> 1987

Met Ala Gly Pro Arg Pro Arg Trp Arg Asp Gln Leu Leu Phe Met Ser 10 Ile Ile Val Leu Val Ile Val Val Ile Cys Leu Met Leu Tyr Ala Leu 25 Leu Trp Glu Ala Gly Asn Leu Thr Asp Leu Pro Asn Leu Arg Ile Gly 40 Phe Tyr Asn Phe Cys Leu Trp Asn Glu Asp Thr Ser Thr Leu Gln Cys 50 55 His Gln Phe Pro Glu Leu Glu Ala Leu Gly Val Pro Arg Val Gly Leu 70 **75** . Gly Leu Ala Arg Leu Gly Val Tyr Gly Ser Leu Val Leu Thr Leu Phe 90 Ala Pro Gln Pro Leu Leu Leu Ala Gln Cys Asn Ser Asp Glu Arg Ala 105 Trp Arg Leu Ala Val Gly Phe Leu Ala Val Ser Ser Val Leu Leu Ala 120 Gly Gly Leu Gly Leu Phe Leu Ser Tyr Val Trp Lys Trp Val Arg Leu

Ser Leu Pro Gly Pro Gly Phe Leu Ala Leu Gly Ser Ala Gln Ala Leu 145

Leu Ile Leu Leu Leu Ile Ala Met Ala Val Phe Pro Leu Arg Ala Glu
175

Arg Ala Glu Ser Lys Leu Glu Ser Cys *

180

<210> 1988 <211> 47 <212> PRT <213> Homo sapiens

Ser Gln Gly Lys Lys Gly Val Val Thr Gly Asp Ser Leu Leu \star 35 40 45 46

<210> 1989 <211> 58 <212> PRT <213> Homo sapiens

<210> 1990 <211> 80 <212> PRT <213> Homo sapiens

Thr His Trp Ala Val Cys Gly Cys Gly Phe Ile Ser Glu Lys Leu * 70 <210> 1991 <211> 48 <212> PRT <213> Homo sapiens <400> 1991 Met Val Arg Trp Lys Arg Glu Ile His Glu Leu Leu Trp Pro Leu Trp 1 5 10 Phe Cys Ser Trp Pro Arg Val Phe Glu Lys Gln Arg Ser Met Thr Asp 20 25 Phe Thr Cys Ser Ala Phe Ser Ala Phe Cys Leu Phe Cys Cys Pro * 40 45 47 <210> 1992 <211> 51 <212> PRT <213> Homo sapiens <400> 1992 Met Leu Phe Ser Leu Gln Thr Ala Ile Val Tyr Cys Thr Ile Thr Val 10 Leu Cys His Arg Thr Leu Ile Phe Ser Ser Met His Lys Cys Ile Met 20 25 ′ Leu Phe Pro Ile Ile His Ile Cys Ser Tyr Val Phe Phe Val Ile Tyr 35 40 Ser Phe * 50 <210> 1993 <211> 79 <212> PRT <213> Homo sapiens <400> 1993 Met Trp Cys Ala Glu Met Leu His Ile Leu Phe Met Gly Leu Arg Val 10 15 Asn Leu Asn His Glu Thr Phe Leu Ile Ile Cys Cys Glu Ile Tyr Gln 20 25 Ala Trp Met Ile Ser Val Phe Leu Val Val Cys Cys Phe Phe Lys Glu

Val Ile Gln Val Pro Leu Leu Ser Cys Gln His Thr Lys Leu Leu Lys

50

Lys Leu Thr Ile Ser Phe Arg Ser Asn Ser Gln Pro Val Glu

70

75

78

<210> 1994 <211> 52 <212> PRT <213> Homo sapiens <400> 1994 Met Thr Ser Leu Gln Lys Arg Leu Leu Ser His Cys Met Gln Cys Thr 5 10 Met Leu Gly Ile Cys Gly Gln Cys Lys Asp Asp Ile Leu Ala 25 Ser Trp Val Ile Gln Glu Phe Thr Ala Met Gln Ser Arg Ser Arg Asn 40 Leu Gln Ser Arg 50 <210> 1995 <211> 164 <212> PRT <213> Homo sapiens <400> 1995 Met Leu Leu Ala Thr Leu Leu Leu Leu Leu Gly Gly Ala Leu Ala 10 His Pro Asp Arg Ile Ile Phe Pro Asn His Ala Cys Glu Asp Pro Pro Ala Val Leu Leu Glu Val Gln Gly Thr Leu Gln Arg Pro Leu Val Arg 40 Asp Ser Arg Thr Ser Pro Ala Asn Cys Thr Trp Leu Ile Leu Gly Ser 55 60 Lys Glu Arg Thr Val Thr Ile Arg Phe Gln Lys Leu His Leu Ala Cys 70 75 Gly Ser Glu Arg Leu Thr Leu Arg Ser Pro Leu Gln Pro Leu Ile Ser 85 Leu Cys Glu Ala Pro Pro Ser Pro Leu Gln Leu Pro Gly Gly Asn Val 100 105 110 Thr Ile Thr Tyr Ser Tyr Ala Gly Gly Gln Ser Thr His Gly Pro Gly 115 120 Leu Pro Ala Leu Leu Gln Ala Ser Pro Ser Pro Trp Cys Leu Cys Arg 135 140 Leu Ala Asp Val Leu Ala Arg Arg Gly Ser Met Pro Glu Pro Pro Leu Cys Ile Cys * 163 <210> 1996 <211> 77 <212> PRT <213> Homo sapiens

His Val Pro Ala Gly Leu Leu Ala Leu Phe Thr Leu Arg His His Lys 20 25 30

Tyr Gly Ala Ala Ile Ala Gly Val Tyr Arg Ala Ala Gly Lys Glu Met 35 45

Ile Pro Phe Glu Ala Leu Thr Leu Gly Thr Gly Gln Thr Phe Cys Val 50 55 60

Leu Val Val Ser Phe Leu Arg Ile Leu Ala Thr Leu * 75 76

<210> 1997 <211> 233 <212> PRT <213> Homo sapiens

<400> 1997 Met Gly Leu Pro Gly Leu Phe Cys Leu Ala Val Leu Ala Ala Ser Ser Phe Ser Lys Ala Arg Glu Glu Glu Ile Thr Pro Val Val Ser Ile Ala Tyr Lys Val Leu Glu Val Phe Pro Lys Gly Arg Trp Val Leu Ile Thr 40 Cys Cys Ala Pro Gln Pro Pro Pro Ile Thr Tyr Ser Leu Cys Gly 50 55 60 Thr Lys Asn Ile Lys Val Ala Lys Lys Val Val Lys Thr His Glu Pro 70 75 80 Ala Ser Phe Asn Leu Asn Val Thr Leu Lys Ser Ser Pro Asp Leu Leu 90 Thr Tyr Phe Cys Arg Ala Ser Ser Thr Ser Gly Ala His Val Asp Ser 105 Ala Arg Leu Gln Met His Trp Glu Leu Trp Ser Arg Gln Arg Gly Arg 120 Pro Gln Gly Gly Asp Asp Leu Pro Gly Val Leu Gly Gln Pro Thr Tyr 135 140 His Gln Gln Pro Asp Arg Glu Gly Trp Ala Gly Pro Pro Ala Ala Glu 155 Thr Met Pro Gln Glu Ala Cys Gln Leu Ser Pro Ser Cys Arg Ala Arg 170 His Arg Thr Trp Phe Trp Cys Gln Ala Cys Lys Gln Arg Gln Cys Ser 180 185 190 Ser Thr Ala Pro Ser Gln Trp Leu Pro Gln Val Val Thr Gln Lys Met 200 205 Glu Asp Trp Gln Gly Pro Pro Gly Glu Pro His Pro Cys Leu Ala Ala 215 Leu Gln Glu His Pro Pro Ser Glu *

<210> 1998 <211> 58 <212> PRT <213> Homo sapiens

 $<\!\!400\!\!> 1998$ Met Pro Ala Ile Val Val Phe Leu Phe Cys Phe Val Ile Ser Asp Gly

<210> 1999 <211> 66 <212> PRT <213> Homo sapiens

<210> 2000 <211> 106 <212> PRT <213> Homo sapiens

<400> 2000 Met Gly Arg Cys Leu Ser Leu Gly Ile Leu Arg Gln Gly Leu Cys Cys 1 5 Pro Cys Trp Ser Val Val Ala Glu Ser Gly Leu Thr Ala Ser Leu Gly 20 25 Gly Ser Gly His Pro Ala Thr Ser Cys Ser Lys Glu Ala Gly Thr Thr 40 Gly Glu Cys Met His His Thr Gln Leu Gly Ile Gln Thr Leu Arg Thr 55 Tyr Tyr Met Pro Asp Ser Val Glu Leu Ser Glu Thr Met Ser Gly Cys 70 Asn Trp Leu Pro Thr Gln Gln Thr Gln Ser Trp Ala Asn Ile Leu Arg 85 Val Tyr Leu Thr Leu Lys Tyr Arg Phe Ser 105 106

<210> 2001 <211> 88 <212> PRT <213> Homo sapiens

<210> 2002 <211> 85 <212> PRT

<213> Homo sapiens

<210> 2003 <211> 46 <212> PRT <213> Homo sapiens

84

<210> 2004 <211> 51 <212> PRT <213> Homo sapiens

<400> 2004 Met Trp Leu Phe Ile Ala Ser Lys Cys Ile Phe Leu Leu Ile Val Pro 1 5 10 Asn Phe Ile Phe Val Phe Trp Arg Lys Val Phe Ser His Asp Arg Leu 20 25 30 Asn Ile Ala Tyr Ser Phe Glu Leu Ser Ser Lys Tyr Ile Phe Ile Leu 40 Phe Ile * 50 <210> 2005 <211> 66 <212> PRT <213> Homo sapiens <400> 2005 Met Val Glu Val Val Ser Leu Leu His Leu Tyr Ala Val Ala Cys Ala 5 10 Arg Lys Gly Pro Phe Pro Asn Thr Lys Asp Leu Ser Gly Trp Thr Pro 25 Ser Ser Gly Arg Glu Glu Leu Trp Lys Gly Lys Arg Ala Ala Ala Ala 35 40 45 Thr Arg Asn Pro Leu Val Leu Thr Gly Leu Gly Ser Pro Ser Ala Arg Leu * 65 <210> 2006 <211> 46 <212> PRT <213> Homo sapiens <400> 2006 Met Leu Val Pro Thr Phe Phe Leu Leu Ser Leu Leu Asp Gln Ser Cys 1 5 10 Leu Ser Ile Cys Val Ser Gln Asp Tyr Phe Ser Ser Ile Val Val Gln 20 25 30 Ile Arg Gln Ile Gly Ser Leu Cys Leu Asn Lys Ser Leu * 40 <210> 2007 <211> 87 <212> PRT <213> Homo sapiens <400> 2007

Met Pro Thr Leu Ala Lys Trp Ile Leu Ser Leu Ser Met Thr Ser Thr

Thr Trp Ser Pro Cys Ser Ser Met Ile Pro Leu Met Ala Ser Ser Thr 25 Ala Pro Ser Arg Leu Arg Thr Gly Ser Leu Pro Ser Met Thr Ile Pro 40 Ser Pro Ser Arg Arg Ser Glu Ile Pro Pro Lys Ser Ser Gly Val Met 55 60 Pro Ala Leu Ile Ile Leu Trp Arg Pro Pro Ala Ser Leu Pro Ala Trp 70 Arg Arg Leu Gly Ile Thr * 85 86

<210> 2008 <211> 58 <212> PRT

<213> Homo sapiens

<400> 2008 Met Pro Ala Ile Val Val Phe Leu Phe Cys Phe Val Ile Ser Asp Gly 5 Leu Thr Leu Ser Pro Arg Leu Asp Cys Thr Gly Leu Asn Leu Leu Ser 20 25 Ser Ser Asp Arg Pro Thr Ser Ala Ser Pro Val Ala Gly Thr Ile Ala 35 40 Val Gln His His Ala Trp Leu Ile Phe *

<210> 2009 <211> 46 <212> PRT <213> Homo sapiens

<400> 2009 Met Leu Met Tyr Met Phe Tyr Val Leu Pro Phe Cys Gly Leu Ala Ala 5 Tyr Ala Leu Thr Phe Pro Gly Cys Ser Trp Leu Pro Asp Trp Ala Leu 20 25 Val Phe Ala Gly Gly Ile Gly Gln Ala Gln Phe Ser His Met

<210> 2010 <211> 235 <212> PRT <213> Homo sapiens

<400> 2010 Met Glu Leu Gly Cys Trp Thr Gln Leu Gly Leu Thr Phe Leu Gln Leu 10 Leu Leu Ile Ser Ser Leu Pro Arg Glu Tyr Thr Val Ile Asn Glu Ala 25 Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys Cys Glu Tyr

35 40 Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu Val Val Gly Tyr 55 60 / Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu Cys Asp Ser Cys Leu 75 Ile His Pro Gly Cys Thr Ile Phe Glu Asn Cys Lys Ser Cys Arg Asn Gly Ser Trp Gly Gly Thr Leu Asp Asp Phe Tyr Val Lys Gly Phe Tyr 105 Cys Ala Glu Cys Arg Ala Gly Trp Tyr Gly Gly Asp Cys Met Arg Cys 120 125 Gly Gln Val Leu Arg Ala Pro Lys Gly Gln Ile Leu Leu Glu Ser Tyr 135 Pro Leu Asn Ala His Cys Glu Trp Thr Ile His Ala Lys Pro Gly Phe 150 155 Val Ile Gln Leu Arg Phe Val Met Leu Ser Leu Glu Phe Asp Tyr Met 165 170 Cys Gln Tyr Asp Tyr Val Glu Gly Cys Asp Gly Asp Asn Arg Asp Gly 185 His Ile Ile Lys Arg Val Cys Gly Asn Glu Arg Ala Ala Pro Ile His 200 Asn Ile Arg Ile Leu Thr Ser Arg Pro Phe Pro Leu Pro Gly Leu Ser 215 Lys Ile Leu Thr Gly Phe His Ala Pro Phe *

<210> 2011

<211> 61

<212> PRT

<213> Homo sapiens

<400> 2011

<210> 2012

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2012

 Met Ile Arg Cys Gly Leu Ala Cys Glu Arg Cys Arg Trp Phe Leu Thr
 1
 15

 Leu Leu Leu Leu Ser Ala Ile Ala Phe Asp Ile Ile Ala Leu Ala Gly
 20
 25
 30

 Arg Gly Trp Leu Gln Ser Ser Asp Arg Val Gln Thr Ser Ser Leu Trp
 35
 40
 45

<210> 2013 <211> 67 <212> PRT <213> Homo sapiens

<210> 2014 <211> 59 <212> PRT <213> Homo sapiens

<210> 2015 <211> 55 <212> PRT <213> Homo sapiens

20 25 30

Leu Ala Ser Leu His Phe Gln His Gly Phe Gly Thr Phe His Thr Pro
35 40 45

Ala Arg Ala Gly Gly Ser Glu
50 55

<210> 2016 <211> 64 <212> PRT <213> Homo sapiens

<210> 2017 <211> 58 <212> PRT <213> Homo sapiens

<210> 2018 <211> 66 <212> PRT <213> Homo sapiens

Ile * 65

PATENT COOPERATION TREATY

PCT

DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT

(PCT Article 17(2)(a), Rule 13ter.1(c) and 39)

| Applicant's or agent's file reference | | Date of mailing (day/month/year) | | | | | | | |
|--|---|---|--|--|--|--|--|--|--|
| | IMPORTANT DECLARATION | 8 7 JUN 2001 | | | | | | | |
| 21272-018 | | \$ 5 2014 5001 | | | | | | | |
| International application No. | International filing date (day/month/year) | (Earliest) Priority date (day/month/year) | | | | | | | |
| | | | | | | | | | |
| PCT/US01/02687 | 25 January 2001 (25.01.2001) | 25 January 2000 (25.01.2000) | | | | | | | |
| International Patent Classification (IPC) or both national classification and IPC | | | | | | | | | |
| IPC(7): C12P 21/06 and US CL: 435/69.1 | | | | | | | | | |
| Applicant | | | | | | | | | |
| · | | | | | | | | | |
| HYSEQ, INC. | | 1 | | | | | | | |
| | | | | | | | | | |
| <u> </u> | | | | | | | | | |
| This International Searching Authority hereby declares, according to Article 17(2)(a), that no international search report | | | | | | | | | |
| will be established on the international application for the reasons indicated below. | | | | | | | | | |
| 1. The subject matter of the inte | rnational application relates to: | į | | | | | | | |
| a. scientific theories. | | | | | | | | | |
| b. mathematical theori | es | 1 | | | | | | | |
| c. plant varieties. | | · } | | | | | | | |
| d. animal varieties. | d. animal varieties. | | | | | | | | |
| e. essential biological processes for the production of plants and animals, other than microbiological processes | | | | | | | | | |
| · - | and the products of such processes. | | | | | | | | |
| , <u> </u> | nethods of doing business. | • | | | | | | | |
| i — | nethods of performing purely mental acts. | İ | | | | | | | |
| | nethods of playing games. | Į. | | | | | | | |
| | i. methods for treatment of the human body by surgery or therapy. | | | | | | | | |
| · = | ent of the animal body by surgery or therapy. | | | | | | | | |
| | practised on the human or animal body. | | | | | | | | |
| 1. mere presentations | of information. | | | | | | | | |
| m computer programs | s for which this International Searching Authority | is not equipped to search prior art. | | | | | | | |
| 2. The failure of the following | and of the interestional analysis to something | th according to a serious and a serious a | | | | | | | |
| meaningful search from being | parts of the international application to comply w | in prescribed requirements prevents a | | | | | | | |
| the description | the claims | the drawings | | | | | | | |
| | | J 5 | | | | | | | |
| 3. The failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C | | | | | | | | | |
| of the Administrative Instructions prevents a meaningful search from being carried out: | | | | | | | | | |
| the written form has not been furnished or does not comply with the standard. | | | | | | | | | |
| the computer readable form has not been furnished or does not comply with the standard. | | | | | | | | | |
| 4. Further comments: | | | | | | | | | |
| | | | | | | | | | |
| 1 | | | | | | | | | |
| | | | | | | | | | |
| No. 10 10 10 10 10 10 10 10 10 10 10 10 10 | | | | | | | | | |
| Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Authorized officer Machine Machi | | | | | | | | | |
| Box PCT | Yoyang J. Kin | | | | | | | | |
| Weshington D.C. 20131 | Washington D.C. 20031 | | | | | | | | |